United States Department of Agriculture

NRCS

Natural Resources Conservation Service

In cooperation with the USDI—Bureau of Land Management, County of Moffat, Colorado First Soil Conservation District, and the Colorado Agricultural Experiment Station

Soil Survey of Moffat County Area, Colorado

How To Use This Soil Survey

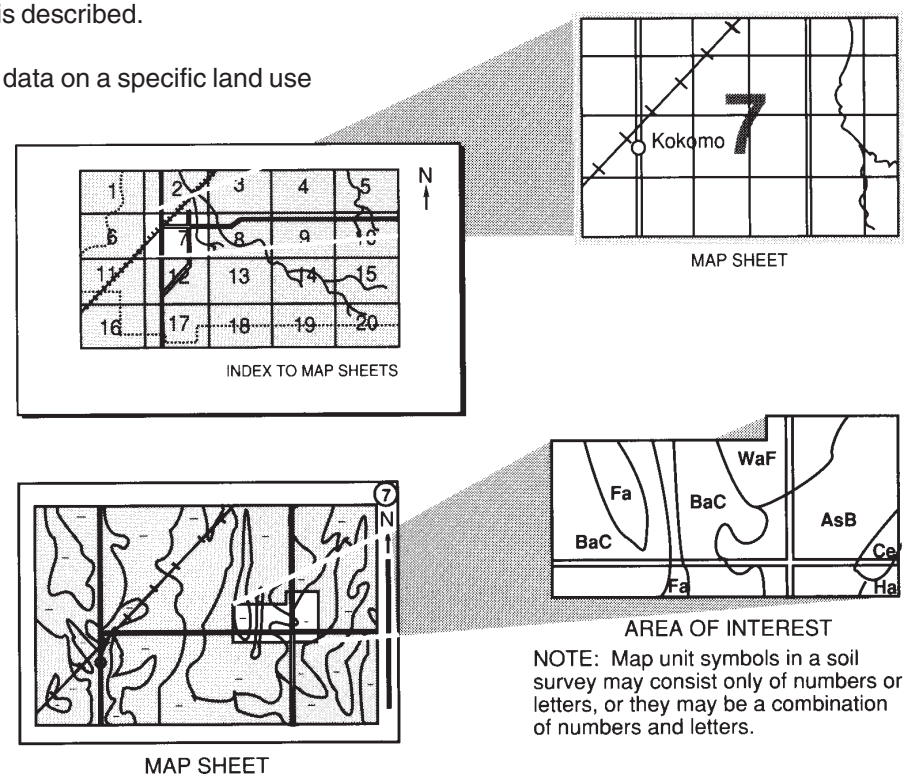
Detailed Soil Maps

The detailed soil maps can be useful in planning the use and management of small areas.

To find information about your area of interest, locate that area on the **Index to Map Sheets**. Note the number of the map sheet and turn to that sheet.

Locate your area of interest on the map sheet. Note the map unit symbols that are in that area. Turn to the **Contents**, which lists the map units by symbol and name and shows the page where each map unit is described.

The **Contents** shows which table has data on a specific land use for each detailed soil map unit. Also see the **Contents** for sections of this publication that may address your specific needs.



NOTE: Map unit symbols in a soil survey may consist only of numbers or letters, or they may be a combination of numbers and letters.

This soil survey is a publication of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (formerly the Soil Conservation Service) has leadership for the Federal part of the National Cooperative Soil Survey.

Major fieldwork for this soil survey was completed in 1989. Soil names and descriptions were approved in 1990. After 1990 join units from the adjacent Dinosaur National Monument and Uintah Area, Utah soil surveys were added to the Moffat soil survey area. Unless otherwise indicated, statements in this publication refer to conditions in the survey area in 1989. This survey was made cooperatively by the Natural Resources Conservation Service and the United States Department of Interior Bureau of Land Management, County of Moffat, Colorado First Soil Conservation District, and the Colorado Agricultural Experiment Station. The survey is part of the technical assistance furnished to the Bureau of Land Management and the Colorado First Soil Conservation District.

Soil maps in this survey may be copied without permission. Enlargement of these maps, however, could cause misunderstanding of the detail of mapping. If enlarged, maps do not show the small areas of contrasting soils that could have been shown at a larger scale.

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Cover: Breaks into the Little Snake River just north of its confluence with the Yampa River. The dominant soil map units shown include Torriorthents-Rock outcrop, shale complex, 30 to 75 percent slopes and Vermillion-Langspring complex, 3 to 25 percent slopes.

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Issued 2004

Foreword

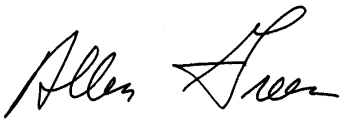
This soil survey contains information that affects land use planning in this survey area. It contains predictions of soil behavior for selected land uses. The survey also highlights soil limitations, improvements needed to overcome the limitations, and the impact of selected land uses on the environment.

This soil survey is designed for many different users. Farmers, ranchers, foresters, and agronomists can use it to evaluate the potential of the soil and the management needed for maximum food and fiber production. Planners, community officials, engineers, developers, builders, and home buyers can use the survey to plan land use, select sites for construction, and identify special practices needed to ensure proper performance. Conservationists, teachers, students, and specialists in recreation, wildlife management, waste disposal, and pollution control can use the survey to help them understand, protect, and enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. The information in this report is intended to identify soil properties that are used in making various land use or land treatment decisions. Statements made in this report are intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are shallow to bedrock. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

These and many other soil properties that affect land use are described in this soil survey. The location of each soil is shown on the detailed soil maps. Each soil in the survey area is described. Information on specific uses is given for each soil. Help in using this publication and additional information are available at the local office of the Natural Resources Conservation Service or the Cooperative Extension Service.



Allen Green
State Conservationist
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Soil Survey of
Moffat County Area, Colorado

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United States Department of Agriculture, Natural Resources Conservation Service, in cooperation with U. S. Department of the Interior—Bureau of Land Management, Colorado First Soil Conservation District, County of Moffat, and the Colorado Agricultural Experiment Station

General Nature of the Survey Area

Moffat County is in the northwest corner of Colorado (fig. 1) and is the second largest county in the state. The county measures 91 miles east-west by 54 miles north-south and is over 3 million acres in size. Craig, the county seat, is located in the eastern part of the county near the Yampa River. At the time of this writing, the population of Craig is about 7,500; the population of Moffat County is about 10,900.

The climate of the survey area ranges from arid to subhumid and the precipitation ranges from 7 to over 20 inches.

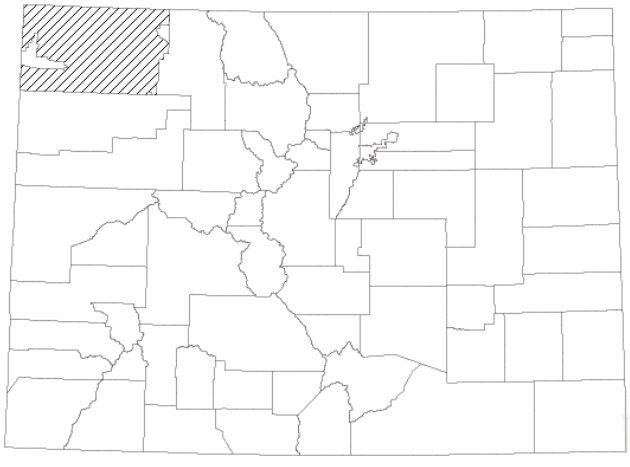

Figure 1.—Location of Moffat County Area in Colorado.

History

The first recorded group of people known to have inhabited the Moffat County area was the Yampatika Ute Indians. The Uncompahgre Utes were the main group living in the area. They summered in the high mountain parks and wintered in the lower valleys of the Yampa River. They were primarily nomadic hunters and gatherers. The area also was occasionally used by groups of Arapaho and Shoshoni Indians who hunted or wintered in the Yampa River drainage basin.

The first recorded explorers to enter the area, around 1776, were two Jesuit priests named Escalante and Garcia. The Dominquez-Escalante expedition later recorded the natural resources of the area.

Fifty years later, mountain men began to appear in the area. One by the name of Ephraim Brown roamed and trapped much of the area. The area once known as Browns Hole (now known as Browns Park) was named for him.

In 1822, over 50 years after the first Spanish expedition to the area, William Ashley organized a major expedition to the Green River Country to help open the area to the fur trade. In 1844 John C. Frémont, with Kit Carson as guide, led an army expedition through Browns Hole and westward to map the land and seek out possible routes for new trails west.

In 1869 John Wesley Powell was commissioned to map the Green River area. He noted on his journey

through Browns Park that the area was of little value and could only be developed through irrigation.

Although cattle were present in Browns Park previously, development of the area was minimal due to the presence of the Ute Indians and the lack of reliable, easy transportation. In 1869, the Union Pacific transcontinental railroad was completed through Wyoming. Soon cattlemen were moving into the area from the north, and by 1871 a major cattle industry was established along the Little Snake, Green, and Yampa Rivers. In 1889, the Craig Land and Mercantile Company was formed and 160 acres of land was purchased to form the original townsite of the city of Craig (fig. 2).

The Routt National Forest was established as a conservation effort in 1905, and by 1915 open grazing on lands within the forest boundaries was stopped and controlled grazing permits were issued. In 1934, the Taylor Grazing Service was created to control grazing on the rest of public domain lands in the area, thus virtually ending the era of the open range in the Moffat area.

In the second decade of the twentieth century, the Moffat Road Railroad came into Steamboat Springs in 1909 and into Craig in 1913. For the first time cattle, sheep, wheat, hay, coal, and other commodities could be shipped directly to Denver, while goods and equipment from eastern factories could arrive directly via rail. This opened the land up even more to settlers. Because of numerous problems, the railroad went bankrupt in 1912.

In 1911, Moffat County was divided from Routt County and Craig became the county seat of Moffat County.

One of the last major homestead efforts was made northwest of Craig in 1916. This was the Great Divide Homestead Colony Number One, developed by Volney T. Hoggatt and promoted by the Denver Post newspaper. Hundreds of settlers were lured into Great Divide where they scratched out a living dryland farming until the drought of the 1930s which caused many of them to abandon their homesteads and leave the area.

By the 1920s, the oil industry had developed to the point that oil fields such as Moffat, Iles, Danforth, and others were in full production.

With the completion of the Moffat Tunnel in 1928, the major problem of reliable, quick, year-round transportation was solved. Craig began to develop as a city along with the expansion and further development of the county's major industries. Since that time, the area's main uses and industries have been hay and wheat farming (with wheat declining rapidly at the time of this writing), cattle ranching, coal mining, and oil extraction. More recently founded industries include tourism and electric power plants.

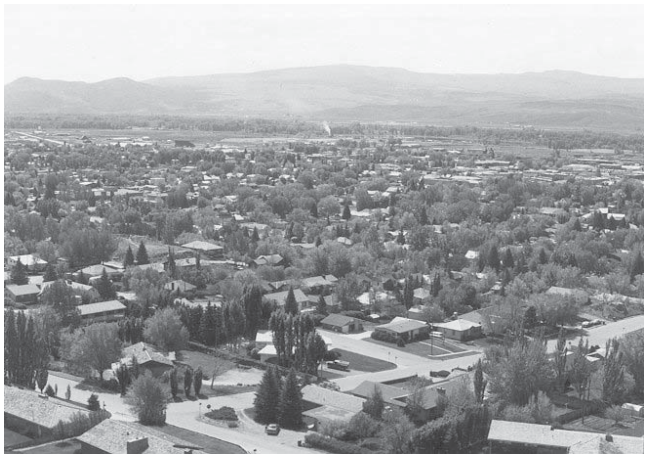

Figure 2.—Craig, Colorado is located on, and adjacent to, the Yampa River Valley. Major soils in the Craig area are Bilhil clay loam, 0 to 3 percent slopes; Pinridge loam, 1 to 12 percent slopes; Rock River sandy loam, 12 to 25 percent slopes; and Yamo loam, 3 to 15 percent slopes.

Water Supply

There are three major rivers which flow through the survey area: the Yampa, the Little Snake, and the Green Rivers. The survey area is dissected by numerous creeks, most of which are intermittent and flow primarily during the spring snowmelt and occasionally after a high intensity rainstorm. The other major perennial streams are Elkhead, Fortification, and Slater Creeks, and the Williams Fork River. The small intermittent and perennial streams add significant amounts to the stream flow of the major rivers during the spring snowmelt.

The Yampa and Little Snake Rivers and the other major perennial streams supply water for irrigation. This water is diverted from the streams and distributed by means of surface ditches.

The Yampa River also supplies domestic water to the city of Craig and water to the Craig Power Plant for steam generation of electricity.

The Yampa and Green Rivers also provide recreation in the forms of river rafting and fishing.

The Elkhead Reservoir is the only large reservoir in the survey area. There are numerous small ponds and reservoirs that intercept surface runoff, spring flow, or stream flow from the small creeks. Most of these small ponds and reservoirs are dry during some parts of the year, except those fed by springs and perennial

streams. These small ponds and reservoirs are the major sources of water for livestock.

Industry and Transportation

Coal mining and the generation of electricity are the main industries in the survey area. Coal mining employs about 13 percent and the generation of electricity about 10 percent of the workforce. Agriculture, although very important to the area, only employs about 1 percent of the workforce. A large portion of the workforce is employed by retail trade, construction, and services. The employment in these sectors is dependent upon the number of people employed in the main industries and upon the tourism in the area.

U.S.Highway 40 and Colorado Highway 13 are the two main highways in the survey area. The Denver, Rio Grande and Western Railroad serves the area with a main line to Craig and spurs to local coal mines. The railroad is the transportation used by the coal mines to ship coal throughout the United States.

U.S. Highway 40 is one of the main truck transportation routes in Western Colorado. It also is a scenic tourist route and brings tourists into and through the area.

Recreation

Moffat County offers a variety of year-round outdoor recreational activities. Public access is available through Routt and White River National Forests, the Bureau of Land Management, and the Colorado Division of Wildlife lands.

In the winter months, Moffat County offers ice skating, cross-county skiing, snowshoeing, sledding and snowmobiling. Swimming, river rafting, bicycling, hiking, fishing, camping, and picnicking can be enjoyed in many areas of Moffat County during the spring, summer, and fall months.

Large numbers of hunters from all over the United States come into the area each fall to hunt deer and elk. Pronghorn antelope, upland game birds, waterfowl, and rabbit hunting can also be enjoyed in Moffat County.

Browns Park National Wildlife Refuge and Dinosaur National Monument are favorite tourist attractions in western Moffat County.

The city of Craig has museums, swimming pools, parks and an eighteen-hole golf course.

The energy and mining industry offers free tours of some of Colorado's largest coal-fired power plants and coal mines.

Natural Resources

Estimates of coal reserves in Moffat County range from 500 million to several billion tons. The deposits are mostly of a high volatility, low sulfur, bituminous grade. Many deposits are at depths accessible for surface strip mining, and the veins usually are thick. Moffat County also has large oil and natural gas reserves. The Sandwash Basin area is underlain by large oil shale deposits which have not been developed.

Sand and gravel are available throughout most of the county along the terraces of the Yampa, Little Snake, and Green Rivers, and within various locations of pediment and alluvial deposits. Thick sequences of limestone outcroppings occur near Juniper Mountain, Cross Mountain, Irish Canyon, Douglas Mountain, and Tanks Peak.

Gold occurs in eluvial, alluvial, and sedimentary deposits in the Wasatch formation of northeast Moffat County. The deposits consist of native free gold scattered irregularly throughout the area. The Douglas Mountain area of western Moffat County contains deposits of copper and iron ore. Copper mining has occurred sporadically in the area since the late 1800s. Uranium occurs in numerous deposits throughout the county, with average concentrations of the mineral. These deposits have been mined at various times in the past.

Known geothermal resources in Moffat County consist of the Craig Warm Water Well and Juniper Hot Springs with temperatures near 100 degrees F.

With three major rivers flowing through the area, water is an available and valuable natural resource providing water for irrigation, domestic uses, and in steam generation of electricity.

There is a small amount of timber in lodgepole pine stands in the far northwestern corner of the county and from ponderosa pine stands on Douglas Mountain. Numerous stands of pinyon pine-juniper woodlands occur throughout the county and where harvested are used mainly for firewood and fence posts.

Agriculture

by William Lee Hill, District Conservationist, NRCS

Agriculture was started in the valleys and basins of the county. Agriculture is the area is diversified: it consists of cow-calf, ewe-lamb, and yearling livestock operations; irrigated and non-irrigated pasture and hay; and non-irrigated wheat, oats, and barley. Agriculture

historically has been a mainstay of the area, but not always a stable business concern.

Livestock enterprises are an important part of agriculture in this area. Privately owned and Federally-administered rangeland provide grazing for cattle and sheep. Approximately 60 percent of the survey area is Bureau of Land Management and U.S. Forest Service land. Livestock operations primarily consist of cow-calf, ewe-lamb, and yearlings. The cattle and sheep industries are periodically upset by price fluctuations for their product.

Alfalfa and grass hay are the main irrigated crops. Most irrigation occurs on the Yampa River, Fortification Creek, and Little Snake River valleys. Most irrigation is done by contour ditch flooding, border flooding, side roll, or center pivot irrigation systems.

In the survey area, the main non-irrigated crop is wheat. Yearly variations in soil moisture and unpredictable markets have reduced acres in this land use. Non-irrigated pasture and hayland acres are an increasing land use.

The Colorado First Soil Conservation District contains the Great Divide Soil Erosion District, which was the first Soil Conservation District in Colorado. Chartered on January 20, 1938, it was renamed the Moffat Soil Conservation District in 1957. The Yampa Soil Conservation District was founded in 1947. The consolidation of the two districts took place on March 31, 1991.

Physiography

The physiography of the survey area consists of two types: the river basins and the mountains.

There are four main rivers which drain the survey area: the Yampa, Little Snake, Green River, and White Rivers.

The Yampa River basin is in the central and east-central part of the survey area. This basin consists of a nearly level broad valley floor and strongly rolling hills dissected by numerous creeks. Most of the creeks are intermittent, flowing mainly during spring snowmelt runoff. The Elkhead Creek, Fortification Creek, and Williams Fork River are the other major perennial streams.

The Little Snake River basin is in the northeast and north-central part of the survey area. This basin consists of a nearly level valley floor and strongly rolling hills dissected by numerous intermittent creeks. Steep breaks also are common in this basin.

The Green River basin is in the northwest part of the survey area. This basin consists of a nearly level valley floor, strongly rolling hills, and gently sloping benches dissected by numerous intermittent creeks. Steep breaks also are common in this basin.

The White River basin is in the southwest part of the survey area. The White River does not flow through the survey area, but part of its drainageway lies within the survey area. This basin consists of strongly rolling hills dissected by numerous small creeks and gullies.

There are six main mountain areas in the survey area: the Williams Fork and Elkhead Mountains, the Danforth Hills, the Cold Spring Mountains, the Yampa Plateau, and the Douglas Mountains.

The Williams Fork Mountains and Danforth Hills are in the southeast and south central part of the survey area and are part of the Yampa River drainageway. This mountain area consists of strongly sloping narrow to broad plateaus dissected by very steep-sided gulches dropping several hundred feet below the plateaus.

The Elkhead Mountains are in the northeast part of the survey area and are part of the Yampa River and Little Snake River drainages. This mountain area consists of several high peaks surrounded by plateaus and mountain ridges dissected by numerous creeks.

The Yampa Plateau, Douglas Mountains, and Cold Spring Mountains are in the western part of the survey area and are part of the Green River and White River drainageways. These mountain areas consist of broad plateaus with occasional prominent peaks. The plateaus are dissected by numerous creeks. Very steep-sided canyons dropping several hundred feet below the plateaus also are common in the Yampa Plateau area.

The elevation of the survey area ranges from 5,200 to 9,700 feet, but the majority of the survey area lies between 6,000 and 7,500 feet.

Geology

The geology of the survey area consists mainly of sedimentary formations. In small areas, loess or basalt colluvial deposits cap the sedimentary formations. Basalt formations occur in small areas.

The river basin areas, the Williams Fork Mountains, and the Danforth Hills areas consist mainly of sandstone and shale formations. The valley floors of the rivers are deposits of alluvium derived from both local and distant sources, and from many different geologic types. In small river basin areas, the sandstone and shale formations are capped by thin loess deposits. In the southeastern part of the Williams Fork Mountains area and on Cedar Mountain, the sandstone and shale formations are capped with varying amounts of basalt rocks.

The Yampa Plateau and Douglas Mountain areas are mainly massive hard sandstone and limestone formations with small amounts of quartzite formations. The Elkhead Mountain area is sandstone and shale

Figure 3.—Mining is an important resource for Moffat County residents. Stockpiling of topsoil for redistribution during reclamation can provide a good medium for reestablishing vegetation on the site once mining is completed.

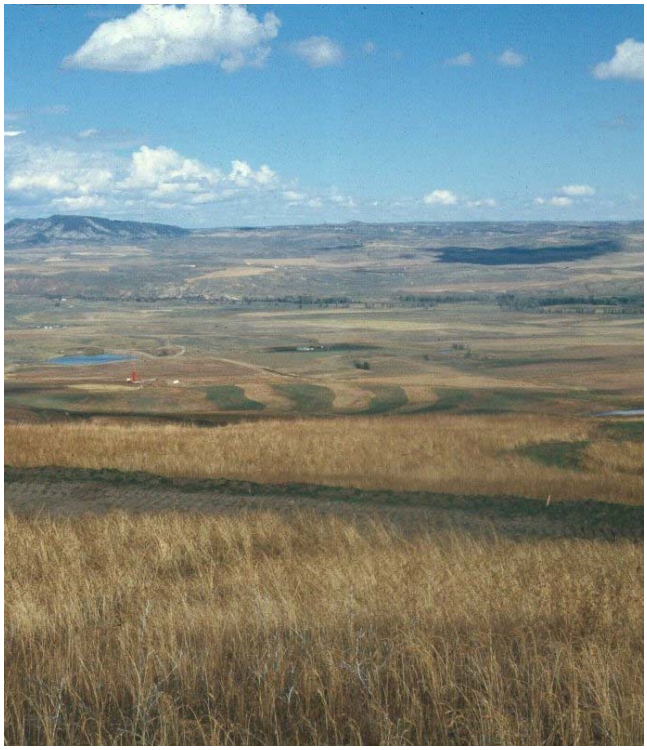

Figure 5.—Reclaimed mine areas, such as this one, provide forage for livestock and wildlife. They also reduce soil erosion.

Figure 4.—Wildlife is an important resource for the Moffat County area. Summer grazing areas, along with forage in winter range, are important to maintaining wildlife numbers and improving the condition of various species.

Figure 6.—Irrigated hay and pasture are major crops grown in Moffat County. One of the main areas for hay production occurs here along the Yampa River.

Figure 7.—Shown is an example of some of the diverse topography located in the survey area. Soils on the valley floor are Yellowash-Piezon complex, 5 to 15 percent slopes and Haterton-Piezon complex, 3 to 12 percent slopes. The mapping unit on the sideslopes is Torriorthents-Rock outcrop, shale complex, 30 to 75 percent slopes. Soils on the plateau are Brownsto-Castee complex, 3 to 25 percent slopes.

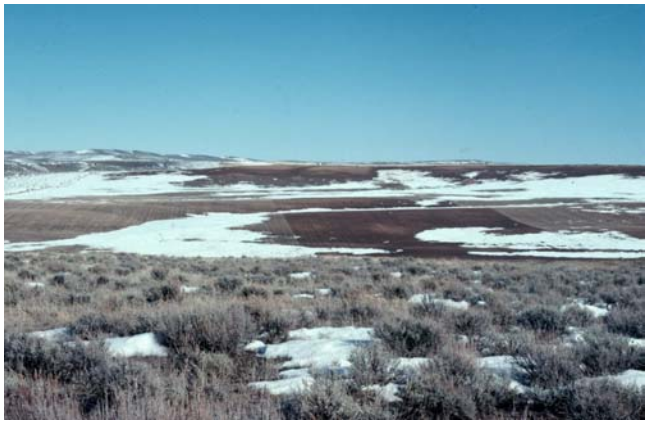

Figure 8.—Snow is an important source of water in Moffat County. Soil moisture is increased in areas where snow collects in depressions or is trapped by shrubs such as sagebrush. Note the snow captured by the sagebrush in the foreground. Increased soil moisture results in an increase in forage production.

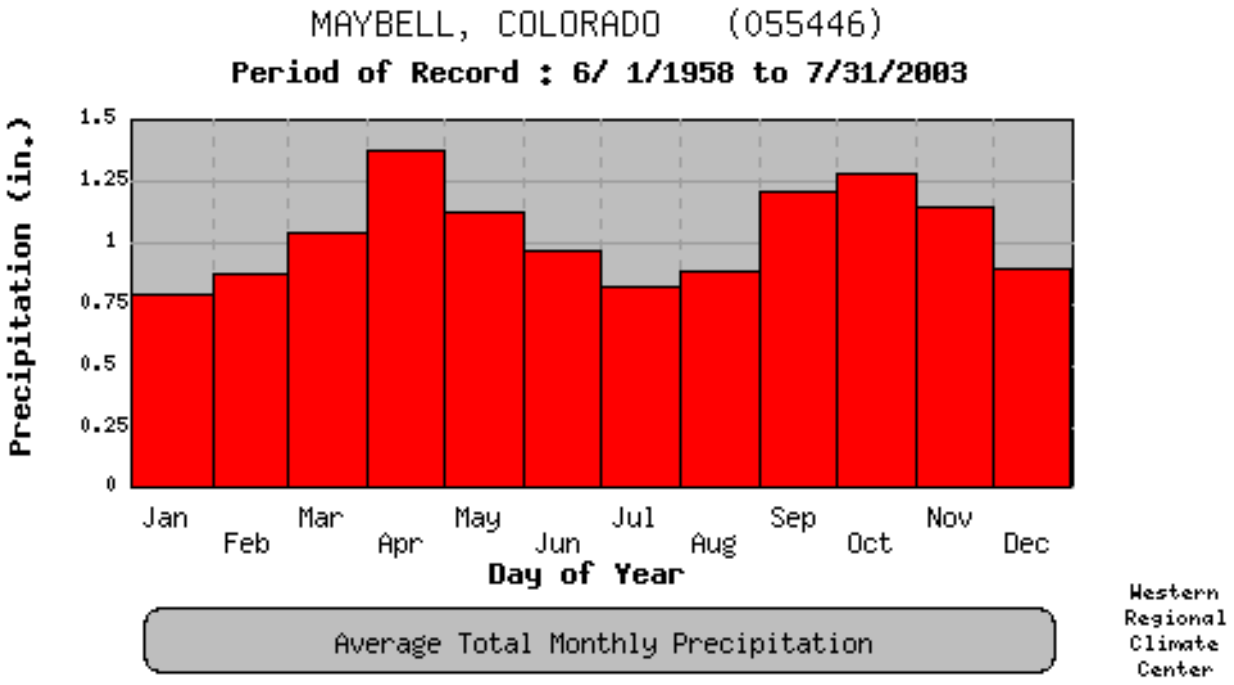

Figure 9—A graph of the average monthly total precipitation for Maybell. It shows that precipitation is evenly distributed throughout the year with an exception of increases in April and May and September, October, and November.

formations capped with varying depths of colluvial deposits of basalt rocks. There also are small areas of basalt formations.

Climate

Prepared by the Natural Resources Conservation Service National Water and Climate Center, Portland, Oregon.

Climate tables are created from climate stations at Dinosaur National Monument and at Maybell, Colorado. In the following narrative, information also is extracted from climate stations Craig 4SW and Hamilton, also in Moffat County. A new mean annual precipitation map produced for the NRCS by Oregon State University using the PRISM modeling system also was used in producing this narrative.

Thunderstorm days, relative humidity, percent sunshine, and wind information are estimated from First Order station Grand Junction, Colorado.

Table 1 gives data on temperature and precipitation for the survey area as recorded at these two climate stations in the period 1971 to 2000. Table 2 shows probable dates of the first freeze in fall and the last freeze in spring. Table 3 provides data on the length of the growing season.

In winter, average temperatures are 24.0 and 19.2 degrees F at Dinosaur and Maybell, respectively. The average daily minimum temperatures in winter are 12.5 and 3.7 degrees at these two stations. The lowest temperatures on record were –29 degrees at Dinosaur on December 22, 1990; and –61 degrees at Maybell on February 1, 1985. In summer, average temperatures are 70.5 degrees at Dinosaur and 64.0 degrees at Maybell. The average daily maximum temperatures are 87.7 degrees and 84.0 degrees, respectively. The highest temperatures ever recorded in the Moffat area were 103 degrees F. at Dinosaur on July 7, 1989, and 102 degrees F. at Maybell on July 21, 1960.

Growing degree days are shown in Table 1. They are equivalent to “heat units”. During the month, growing degree days accumulate by the amount that the average temperature each day exceeds a base temperature (40 degrees F). The normal monthly accumulation is used to schedule single or successive plantings of a crop between the last freeze in spring and the first freeze in fall.

Average annual total precipitation over the county is dependent upon elevation and east-west location. In general, precipitation increases from west to east across Moffat County, with the lowest elevation locations along the Green and lower Vermillion Rivers receiving only about 9 inches of annual precipitation. Dinosaur climate station receives 11.78 inches annually, while 13.25 inches falls at Maybell, 16.39 inches at Craig, and 19.45 inches at Hamilton. The annual precipitation map indicates between 10 and 15 inches over most of the western half of the county, with higher elevations receiving up to 18-20 inches. In the eastern half of the county annual precipitation is generally between 12 and 18 inches, with higher elevations receiving between 18 and 22 inches. The highest elevation of the county in the Routt National Forest near the Routt County border receives nearly 50 inches of annual precipitation. Most precipitation at higher elevations comes in the winter and spring, while at lower elevations about 50 percent comes during this period. The growing season is quite short over the county, with the longest growing season in the lower western valleys. For instance, at Dinosaur the growing season is from May through September, and during this period about 5.3 inches of precipitation falls, which is about 45 percent of the annual total at Dinosaur. The heaviest 1-day precipitation amounts during the periods of record were 1.98 inches at Dinosaur on August 2, 1968, and 2.46 inches at Maybell on April 22, 1985. Thunderstorms occur on about 30-35 days each year, and most occur between mid-June and early September.

Average seasonal snowfall over the county also is highly dependent upon elevation. At Dinosaur the average annual total is 44.9 inches, while it is 66.3 inches at Maybell and 78.2 inches at Craig. The higher terrain receives between 80 and 120 inches of snowfall per year, and highest elevations in the eastern part of the county likely receive over 200 inches. The greatest snow depth at any one time during the period of record at Dinosaur was 23 inches recorded on February 9, 1985; at Maybell the greatest snow depth was 29 inches on December 26, 1983. At Hamilton, the record is 39 inches on the ground on Christmas Eve, 1948. On average, about 70 days per year have at least 1 inch of snow on the ground at Dinosaur and Maybell, while about 80 days per year is common at Craig, and at higher elevations between 4 and 6 months of the year have snow on the ground. The heaviest 1-day snowfalls on record were: 14.0 inches at Dinosaur on November 21, 1983; 15.5 inches at Maybell on January 29, 1980; and 26.0 inches at Hamilton on December 30, 1951.

The average relative humidity in mid-afternoon is about 20 percent in July and about 60 percent in January. Humidity is higher at night, and the average at dawn is about 60 percent in the summer and 80 percent in the winter. The sun shines about 70-80 percent of the time in summer and around 55-60 percent of the time in the winter. The prevailing wind is from the west in most months. Highest average speeds

are in the winter and spring, averaging around 10 mph. However, winds are highly dependent upon elevation and exposure.

How This Survey Was Made

This survey was made to provide information about the soils and miscellaneous areas in the survey area. The information includes a description of the soils and miscellaneous areas and their location and a discussion of their suitability, limitations, and management for specified uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They dug many holes to study the soil profile, which is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

The soils and miscellaneous areas in the survey area are in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept or model of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Figure 10.—Early in the making of this survey, a soil scientist extracts a core sample in an area of map unit 79, Forelle-Evanot complex, 1 to 12 percent slopes. These soils are used for dryland wheat production.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show topographic features, trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Descriptions, names, and delineations of soils in this soil survey do not fully agree with those on soil maps for adjacent survey areas. Differences are the result of better knowledge of soils, modifications in series concepts, intensity of mapping, or the extent of soils within the survey area.

Detailed Soil Map Units

The map units delineated on the detailed soil maps in this survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this section, along with the maps, can be used to determine the suitability and potential of a unit for specific uses. They also can be used to plan the management needed for those uses.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. The contrasting components are mentioned in the map unit descriptions. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives the principal hazards and limitations to be considered in planning for specific uses.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Adderton loam is a phase of the Adderton series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Map unit 6, Avalon-Mack complex, 1 to 12 percent slopes is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Map unit 48, Crago-Pensore-Grapit association, 6 to 75 percent slopes is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Map unit 70, Fluvaquents and Haplaquolls soils, frequently flooded is an undifferentiated group in this survey area.

This survey includes *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Map unit 8, Badland, is an example.

Table 4 gives the acreage and proportionate extent of each map unit. Other tables give properties of the soils and the limitations, capabilities, and potentials for many uses. The Glossary defines many of the terms used in describing the soils or miscellaneous areas.

1—Abor silty clay loam, 12 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,300 to 7,000 feet (1,920 to 2,134 meters)
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.0 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Abor and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Abor soils

Landform: Hillslopes
Parent material: Residuum derived from shale
Slope: 12 to 25 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 5.7 inches (low)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 4 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Clayey Foothills
Potential native vegetation: western wheatgrass, Wyoming big sagebrush, Sandberg bluegrass, bluebunch wheatgrass, bottlebrush squirreltail, green needlegrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 4 inches; silty clay loam
4 to 37 inches; silty clay
37 to 41 inches; weathered bedrock

Minor Components

Rock outcrop
Composition: About 5 percent

Moyerson and similar soils
Composition: About 5 percent

Bulkley and similar soils
Composition: About 5 percent

2—Abor silty clay loam, 25 to 65 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,300 to 7,000 feet (1,920 to 2,134 meters)
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Abor and similar soils: 80 percent
Minor components: 20 percent

Component Descriptions

Abor soils

Landform: Hillslopes
Parent material: Residuum derived from shale
Slope: 25 to 65 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 5.7 inches (low)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 4 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Clayey Foothills
Potential native vegetation: western wheatgrass, Wyoming big sagebrush, Sandberg bluegrass, bluebunch wheatgrass, bottlebrush squirreltail, green needlegrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 4 inches; silty clay loam
4 to 37 inches; silty clay
37 to 41 inches; weathered bedrock

Minor Components

Bulkley and similar soils
Composition: About 5 percent

Moyerson and similar soils
Composition: About 5 percent

Rock outcrop
Composition: About 5 percent

Areas with stony surfaces and similar soils
Composition: About 5 percent

3—Adderton loam, 1 to 10 percent slopes

Map Unit Setting

Major Land Resource Area: 47
Elevation: 7,000 to 8,500 feet (2,134 to 2,591 meters)
Mean annual precipitation: 16 to 20 inches (406 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Adderton and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Adderton soils

Landform: Alluvial fans, drainageways
Parent material: Alluvium derived from sedimentary rocks
Slope: 1 to 10 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 10.4 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Flooding hazard: Rare
Runoff class: Medium
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Swale
Potential native vegetation: basin wildrye, slender wheatgrass, western wheatgrass, Letterman's needlegrass, mountain big sagebrush, mountain brome, mountain snowberry
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 22 inches; loam
22 to 39 inches; loam
39 to 60 inches; fine sandy loam

Minor Components

Moderately well and somewhat poorly drained soils and similar soils
Composition: About 10 percent
Landform: Stream terraces

4—Almy loam, 3 to 15 percent slopes

Map Unit Setting

Major Land Resource Area:
Elevation: 6,500 to 7,200 feet (1,981 to 2,194 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)

Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Almy and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Almy soils

Landform: Alluvial fans, fan terraces
Parent material: Loess and alluvium derived from sandstone
Slope: 3 to 15 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 9.3 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 2 (slightly sodic)
Ecological site: Rolling Loam
Potential native vegetation: western wheatgrass, Wyoming big sagebrush, prairie Junegrass, Indian ricegrass, bluebunch wheatgrass, needleandthread
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 6 inches; loam
6 to 30 inches; clay loam
30 to 60 inches; loam

Minor Components

Moderately coarse textured soils and similar soils
Composition: About 5 percent

Spool and similar soils
Composition: About 5 percent

5—Apmay clay loam, 0 to 1 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 7,000 feet (1,829 to 2,134 meters)
Mean annual precipitation: 13 to 16 inches (330 to 406 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Apmay and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Apmay soils

Landform: Flood plains
Parent material: Alluvium derived from mixed sources
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 6.5 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Flooding hazard: Rare
Seasonal high water table depth: About 18 to 36 inches
Runoff class: Low
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: River Bottom
Potential native vegetation: basin wildrye, western wheatgrass, willow, slender wheatgrass, Nebraska sedge
Land capability subclass (irrigated): 4c
Land capability subclass (nonirrigated): 4c

Typical Profile:
0 to 17 inches; clay loam
17 to 30 inches; clay loam
30 to 60 inches; extremely gravelly sand

Minor Components

Lander and similar soils
Composition: About 5 percent

Haplaquolls and similar soils
Composition: About 5 percent

6—Avalon-Mack complex, 1 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,500 to 6,500 feet (1,676 to 1,981 meters)

Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Freeze-free period: 90 to 105 days

Map Unit Composition

Avalon and similar soils: 45 percent
Mack and similar soils: 45 percent
Minor components: 10 percent

Component Descriptions

Avalon soils

Landform: Eroded areas fan terraces
Parent material: Eolian deposits
Slope: 1 to 12 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 8.8 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 30 percent
Gypsum maximum: None
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 3 (slightly sodic)
Ecological site: Semidesert Loam
Potential native vegetation: Wyoming big sagebrush, shadscale saltbush, western wheatgrass, Indian ricegrass, bottlebrush squirreltail, fourwing saltbush, needleandthread, saline wildrye
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 3 inches; fine sandy loam
3 to 12 inches; clay loam
12 to 60 inches; clay loam

Mack soils

Landform: Noneroded fan terraces
Parent material: Eolian deposits
Slope: 1 to 12 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 9.7 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 40 percent
Gypsum maximum: None
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 3 (slightly sodic)
Ecological site: Loamy Saltdesert
Potential native vegetation: galleta, shadscale saltbush, Indian ricegrass, bottlebrush squirreltail, needleandthread, saltbush
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 4 inches; loam
4 to 13 inches; clay loam
13 to 42 inches; clay loam
42 to 60 inches; gravelly loam

Minor Components

Coarse-loamy soils and similar soils
Composition: About 10 percent
Landform: Drainageways

7—Avalon-Persayo, moist-Degater complex, 3 to 30 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,700 to 6,000 feet (1,737 to 1,829 meters)
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Freeze-free period: 90 to 105 days

Map Unit Composition

Avalon and similar soils: 30 percent
Persayo and similar soils: 25 percent
Degater and similar soils: 20 percent
Minor components: 25 percent

Component Descriptions

Avalon soils

Landform: Cuestas
Parent material: Eolian deposits
Slope: 3 to 10 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 6.8 inches (moderate)

Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 30 percent
Gypsum maximum: About 1 percent
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 1 (slightly sodic)
Ecological site: Semidesert Loam
Potential native vegetation: Wyoming big sagebrush, Indian ricegrass, galleta, shadscale saltbush, western wheatgrass, needleandthread, winterfat
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 3 inches; loam
3 to 36 inches; clay loam
36 to 43 inches; channery clay loam
43 to 47 inches; weathered bedrock

Persayo soils

Landform: Hillslopes
Parent material: Residuum derived from sandstone and shale
Slope: 10 to 30 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 1.6 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 15 percent
Gypsum maximum: About 15 percent
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Semidesert Loam
Potential native vegetation: Wyoming big sagebrush, Indian ricegrass, galleta, needleandthread, western wheatgrass, shadscale saltbush, streambank wheatgrass, winterfat
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 2 inches; channery loam
2 to 10 inches; loam
10 to 14 inches; weathered bedrock

Degater soils

Landform: Hillslopes
Parent material: Residuum derived from shale
Slope: 10 to 30 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 5.3 inches (low)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 15 percent
Gypsum maximum: About 2 percent
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Clayey Slopes
Potential native vegetation: western wheatgrass, saline wildrye, shadscale saltbush, Gardner's saltbush, Wyoming big sagebrush, bottlebrush squirreltail
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 1 inch; clay
1 inch to 20 inches; clay
20 to 38 inches; clay
38 to 42 inches; weathered bedrock

Minor Components

Mack and similar soils
Composition: About 13 percent
Landform: Cuestas

Loamy soils over hard sandstone bedrock and similar soils
Composition: About 12 percent
Landform: Cuestas
Depth to restrictive feature: inches to bedrock (lithic)

8—Badland

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,500 to 6,500 feet (1,676 to 1,981 meters)
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 48 degrees F. (5.6 to 8.9 degrees C.)
Freeze-free period: 75 to 105 days

Map Unit Composition

Badland: 90 percent
Minor components: 10 percent

Component Descriptions

Badland

Description: Badland consists of very steep barren land that is dissected by many intermittent drainage channels. Badlands are associated with soft geologic materials. Local relief generally ranges from 0 to 1,000 feet. Potential runoff is very high and erosion is active.
Landform: Breaks
Slope: 40 to 75 percent
Depth to restrictive feature: 0 to 3 inches to bedrock (paralithic)
Drainage class: Somewhat excessively drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 0.0 inches (very low)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 15 percent
Gypsum maximum: About 10 percent
Salinity maximum: About 20 mmhos/cm (strongly saline)
Sodium adsorption ratio maximum: About 30 (strongly sodic)
Land capability subclass (nonirrigated): 8

Minor Components

Hiatha and similar soils
Composition: About 5 percent
Landform: Breaks
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)

Chipeta and similar soils
Composition: About 5 percent
Landform: Breaks
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)

9—Baroid-Eghelm complex, 0 to 3 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,300 to 6,000 feet (1,615 to 1,829 meters)
Mean annual precipitation: 7 to 10 inches (178 to 254 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Freeze-free period: 90 to 105 days

Map Unit Composition

Baroid and similar soils: 55 percent
Eghelm and similar soils: 35 percent
Minor components: 10 percent

Component Descriptions

Baroid soils

Landform: Flood plains
Parent material: Alluvium derived from mixed sources
Slope: 0 to 3 percent
Drainage class: Somewhat excessively drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 5.4 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Flooding hazard: Rare
Seasonal high water table depth: About 60 to 84 inches
Runoff class: Negligible
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 8 mmhos/cm (slightly saline)
Sodium adsorption ratio maximum: About 10 (slightly sodic)
Ecological site: Cold Desert Overflow
Potential native vegetation: basin wildrye, common reed, alkali sacaton, western wheatgrass
Land capability subclass (irrigated): 4s
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 3 inches; loamy fine sand
3 to 47 inches; stratified fine sand to fine sandy loam
47 to 60 inches; loam

Eghelm soils

Landform: Flood plains
Parent material: Alluvium derived from mixed sources
Slope: 0 to 3 percent
Drainage class: Well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 7.5 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Flooding hazard: Rare
Seasonal high water table depth: About 60 to 72 inches
Runoff class: Very low
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None

Salinity maximum: About 8 mmhos/cm (slightly saline)
Sodium adsorption ratio maximum: About 20 (moderately sodic)
Ecological site: Cold Desert Overflow
Potential native vegetation: basin wildrye, reed, alkali sacaton, inland saltgrass, western wheatgrass
Land capability subclass (irrigated): 4s
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 4 inches; fine sandy loam
4 to 21 inches; stratified fine sandy loam to sandy clay loam
21 to 60 inches; fine sandy loam

Minor Components

Youngston and similar soils
Composition: About 10 percent
Landform: Depressions

10—Battlement fine sandy loam, 0 to 3 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 6,800 feet (1,829 to 2,073 meters)
Mean annual precipitation: 11 to 15 inches (279 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Battlement and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Battlement soils

Landform: Stream terraces, flood plains
Parent material: Alluvium from mixed sources
Slope: 0 to 3 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 11.1 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Flooding hazard: Rare
Runoff class: Low
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Foothill Swale
Potential native vegetation: basin wildrye, western wheatgrass, basin big sagebrush, fourwing saltbush
Land capability subclass (irrigated): 4c
Land capability subclass (nonirrigated): 4c

Typical Profile:
0 to 3 inches; fine sandy loam
3 to 60 inches; stratified sandy loam to silty clay loam

Minor Components

Cowestglen and similar soils
Composition: About 5 percent

Battlement, saline and similar soils
Composition: About 5 percent

Soils with water tables at 40 to 60 inches and similar soils
Composition: About 5 percent
Landform: Yampa River and Little Snake River valleys

11—Battlement silt loam, saline, 0 to 3 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 7,200 feet (1,829 to 2,194 meters)
Mean annual precipitation: 11 to 15 inches (279 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Battlement and similar soils: 80 percent
Minor components: 20 percent

Component Descriptions

Battlement soils

Landform: Flood plains, stream terraces
Parent material: Alluvium from mixed sources
Slope: 0 to 3 percent
Drainage class: Moderately well drained

Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 7.5 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Flooding hazard: Rare
Seasonal high water table depth: About 40 to 60 inches
Runoff class: Medium
Calcium carbonate maximum: About 4 percent
Gypsum maximum: About 5 percent
Salinity maximum: About 16 mmhos/cm (moderately saline)
Sodium adsorption ratio maximum: About 8 (slightly sodic)
Ecological site: Salt Meadow
Potential native vegetation: alkali sacaton, inland saltgrass, western wheatgrass, basin wildrye, fourwing saltbush, greasewood, sedge, tall rabbitbrush
Land capability subclass (nonirrigated): 6s

Typical Profile:
0 to 4 inches; silt loam
4 to 17 inches; stratified loam to silty clay loam
17 to 30 inches; stratified loam to silty clay loam
30 to 60 inches; stratified sandy loam to loam

Minor Components

Soils with a strongly saline surface layer and similar soils
Composition: About 7 percent

Cowestglen and similar soils
Composition: About 7 percent

Well drained soils along intermittent streams and similar soils
Composition: About 6 percent

12—Berlake sandy loam, 3 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,200 to 7,200 feet (1,890 to 2,195 meters)
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Berlake and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Berlake soils

Landform: Alluvial fans, hillslopes
Parent material: Alluvium and residuum derived from sandstone
Slope: 3 to 12 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 5.7 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 1 (slightly sodic)
Ecological site: Sandy Foothills
Potential native vegetation: Wyoming big sagebrush, needleandthread, Indian ricegrass, antelope bitterbrush, bluebunch wheatgrass, prairie Junegrass, western wheatgrass
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 10 inches; sandy loam
10 to 23 inches; sandy clay loam
23 to 31 inches; sandy loam
31 to 60 inches; loamy sand

Minor Components

Rock River and similar soils
Composition: About 5 percent

Weed and similar soils
Composition: About 5 percent

Ironsprings and similar soils
Composition: About 5 percent

13—Berlake sandy loam, 12 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,200 to 7,700 feet (1,890 to 2,347 meters)

Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Berlake and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Berlake soils

Landform: Hillslopes
Parent material: Colluvium and residuum derived from sandstone
Slope: 12 to 25 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 5.7 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 1 (slightly sodic)
Ecological site: Deep Loam
Potential native vegetation: Wyoming big sagebrush, needleandthread, western wheatgrass, bluebunch wheatgrass, muttongrass, Letterman's needlegrass, Saskatoon serviceberry, antelope bitterbrush, prairie Junegrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 10 inches; sandy loam
10 to 23 inches; sandy clay loam
23 to 31 inches; sandy loam
31 to 60 inches; loamy sand

Minor Components

Weed and similar soils
Composition: About 5 percent

Rock River and similar soils
Composition: About 5 percent

Ironsprings and similar soils
Composition: About 5 percent

14—Berlake-Maysprings complex, 3 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,500 to 7,300 feet (1,981 to 2,225 meters)
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Berlake and similar soils: 55 percent
Maysprings and similar soils: 30 percent
Minor components: 15 percent

Component Descriptions

Berlake soils

Landform: Plateaus, hills
Position on landform: Toeslope
Parent material: Alluvium and residuum derived from sandstone
Slope: 3 to 12 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 6.0 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 1 (slightly sodic)
Ecological site: Sandy Foothills
Potential native vegetation: Wyoming big sagebrush, needleandthread, Indian ricegrass, antelope bitterbrush, bluebunch wheatgrass, prairie Junegrass, western wheatgrass
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 10 inches; coarse sandy loam
10 to 25 inches; sandy clay loam
25 to 33 inches; coarse sandy loam
33 to 60 inches; loamy coarse sand

Maysprings soils

Landform: Plateaus, hills

Figure 11.—Active water erosion occurring on an area of map unit 14, Berlake-Maysprings complex, 3 to 12 percent slopes. These soils are highly susceptible to water erosion when left unprotected. Maintenance of cover, or the use of other conservation practices such as conservation strips, help reduce the potential for erosion and preserve the valuable topsoil layer.

Position on landform: Toeslope
Parent material: Alluvium and residuum derived from sandstone
Slope: 3 to 12 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 5.1 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 2 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Rolling Loam
Potential native vegetation: Wyoming big sagebrush, needleandthread, bluebunch wheatgrass, bottlebrush squirreltail, prairie Junegrass, western wheatgrass, yellow rabbitbrush
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 6 inches; coarse sandy loam
6 to 22 inches; sandy clay loam
22 to 29 inches; coarse sandy loam
29 to 60 inches; coarse sand

Minor Components

Ironsprings and similar soils
Composition: About 8 percent

Rock River and similar soils
Composition: About 7 percent

15—Berlake-Taffom-Gretdivid complex, 10 to 20 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,200 to 7,300 feet (1,890 to 2,225 meters)
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Berlake and similar soils: 35 percent
Taffom and similar soils: 30 percent
Gretdivid and similar soils: 15 percent
Minor components: 20 percent

Component Descriptions

Berlake soils

Landform: Hillslopes
Parent material: Colluvium and residuum derived from sandstone
Slope: 10 to 20 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 8.6 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Deep Loam
Potential native vegetation: Wyoming big sagebrush, needleandthread, Indian ricegrass, Letterman's needlegrass, antelope bitterbrush, bluebunch wheatgrass, prairie Junegrass, western wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 14 inches; coarse sandy loam
14 to 57 inches; sandy clay loam
57 to 60 inches; sandy loam

Taffom soils

Landform: Hillslopes
Parent material: Colluvium and residuum derived from sandstone
Slope: 10 to 20 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 7.1 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Rolling Loam
Potential native vegetation: Wyoming big sagebrush, needleandthread, western wheatgrass, prairie Junegrass, Indian ricegrass, Nevada bluegrass, bluebunch wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 7 inches; coarse sandy loam
7 to 41 inches; sandy clay loam
41 to 60 inches; loamy sand

Gretdivid soils

Landform: Hills
Position on landform: Summit
Parent material: Residuum derived from sandstone
Slope: 10 to 20 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 3.4 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandyland
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; loamy coarse sand
3 to 7 inches; sandy clay loam
7 to 60 inches; coarse sand

Minor Components

Styers and similar soils
Composition: About 10 percent
Landform: Hillslopes

Mayspings and similar soils
Composition: About 5 percent
Landform: Hills
Position on landform: Summit

Ironspings and similar soils
Composition: About 5 percent
Landform: Hillslopes

16—Bilhil clay loam, 0 to 3 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 6,800 feet (1,829 to 2,073 meters)
Mean annual precipitation: 12 to 15 inches (305 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Bilhil and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Bilhil soils

Landform: Alluvial fans, stream terraces
Parent material: Alluvium derived from mixed sources
Slope: 0 to 3 percent
Drainage class: Moderately well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 10.3 inches (high)
Shrink-swell potential: About 7.5 percent (high)
Seasonal high water table depth: About 36 to 60 inches
Runoff class: Very high
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Foothill Swale
Potential native vegetation: basin wildrye, basin big

sagebrush, slender wheatgrass, western wheatgrass, Nevada bluegrass
Land capability subclass (irrigated): 4c
Land capability subclass (nonirrigated): 4c

Typical Profile:
0 to 12 inches; clay loam
12 to 23 inches; clay
23 to 60 inches; clay

Minor Components

Battlement and similar soils
Composition: About 5 percent

Haplaquolls and similar soils
Composition: About 5 percent

Soils with extremely gravelly sand at 30 to 60 inches deep and similar soils
Composition: About 5 percent

17—Binco gravelly clay loam, 15 to 45 percent slopes, very stony

Map Unit Setting

Major Land Resource Area: 34
Elevation: 7,200 to 8,200 feet (2,195 to 2,499 meters)
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Binco and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Binco soils

Landform: Hillslopes
Parent material: Residuum and colluvium derived from shale
Slope: 15 to 45 percent
Surface fragments: About 1 percent (shape or size unspecified)
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 9.0 inches (high)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 10 percent
Gypsum maximum: About 5 percent
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Claypan
Potential native vegetation: alkali sagebrush, bluebunch wheatgrass, prairie Junegrass, western wheatgrass, Nevada bluegrass, bottlebrush squirreltail
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 2 inches; gravelly clay loam
2 to 9 inches; clay loam
9 to 60 inches; clay

Minor Components

Somewhat poorly drained soils and similar soils
Composition: About 5 percent
Landform: Landslides
Binco and similar soils
Composition: About 5 percent
Slope: 3 to 15 percent

18—Boltus-Beamton complex, 2 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 7,000 feet (1,829 to 2,134 meters)
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Boltus and similar soils: 50 percent
Beamton and similar soils: 25 percent
Minor components: 25 percent

Component Descriptions

Boltus soils

Landform: Hills
Position on landform: Footslope, backslope
Parent material: Residuum derived from shale
Slope: 2 to 12 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)

Available water capacity: About 2.7 inches (very low)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 5 percent
Gypsum maximum: About 15 percent
Salinity maximum: About 8 mmhos/cm (slightly saline)
Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Alkali Upland
Potential native vegetation: Indian ricegrass, streambank wheatgrass, streambank wheatgrass, western wheatgrass, bottlebrush squirreltail
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 3 inches; silty clay loam
3 to 17 inches; silty clay
17 to 21 inches; weathered bedrock

Beamton soils

Landform: Hills
Position on landform: Footslope
Parent material: Residuum and alluvium derived from shale
Slope: 2 to 12 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 4.7 inches (low)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Very high
Calcium carbonate maximum: About 5 percent
Gypsum maximum: About 10 percent
Salinity maximum: About 8 mmhos/cm (slightly saline)
Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Alkali Upland
Potential native vegetation: Gardner's saltbush, Indian ricegrass, streambank wheatgrass, streambank wheatgrass, western wheatgrass, bottlebrush squirreltail
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 2 inches; silty clay loam
2 to 26 inches; silty clay loam
26 to 33 inches; silty clay loam
33 to 37 inches; weathered bedrock

Minor Components

Shallow and moderately deep loamy soils and similar soils
Composition: About 13 percent
Landform: Hills
Position on landform: Footslope
Depth to restrictive feature: 10 to 40 inches to bedrock (lithic)

Leswill and similar soils
Composition: About 12 percent
Landform: Nearly level to gently sloping hills
Position on landform: Footslope

19—Borollic Natrargids-Borollic Haplargids-Ustic Torrifluvents complex, 0 to 20 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 6,800 feet (1,829 to 2,073 meters)
Mean annual precipitation: 11 to 15 inches (279 to 381 millimeters)
Mean annual air temperature: 41 to 45 degrees F. (5.2 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Borollic Natrargids and similar soils: 40 percent
Borollic Haplargids and similar soils: 30 percent
Ustic Torrifluvents and similar soils: 25 percent
Minor components: 5 percent

Component Descriptions

Borollic Natrargids soils

Landform: Stream terraces, hills
Position on landform: Toeslope
Parent material: Alluvium derived from sedimentary rocks
Slope: 0 to 6 percent
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 7.7 inches (moderate)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Very high
Calcium carbonate maximum: About 5 percent
Gypsum maximum: About 3 percent
Salinity maximum: About 16 mmhos/cm (moderately saline)
Sodium adsorption ratio maximum: About 25 (moderately sodic)

Potential native vegetation: wheatgrass, sagebrush, black greasewood, Gardner's saltbush, Nevada bluegrass, bottlebrush squirreltail, prairie Junegrass
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 5 inches; fine sandy loam
5 to 45 inches; silty clay loam
45 to 60 inches; sandy clay loam

Borollic Haplargids soils

Landform: Hills, breaks
Position on landform: Toeslope
Parent material: Alluvium derived from sedimentary rocks
Slope: 3 to 20 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 9.1 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 4 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Potential native vegetation: Wyoming big sagebrush, western wheatgrass, Indian ricegrass, Nevada bluegrass, needleandthread, prairie Junegrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 2 inches; sandy loam
2 to 30 inches; clay loam
30 to 60 inches; sandy loam

Ustic Torrifluvents soils

Landform: Flood plains
Parent material: Alluvium derived from sedimentary rocks
Slope: 0 to 1 percent
Drainage class: Moderately well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 9.4 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Flooding hazard: Rare
Seasonal high water table depth: About 36 to 72 inches
Runoff class: Low
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Potential native vegetation: basin wildrye, basin big sagebrush, western wheatgrass
Land capability subclass (nonirrigated): 4c

Typical Profile:
0 to 4 inches; fine sandy loam
4 to 60 inches; stratified loamy sand to clay loam

Minor Components

Haplaquolls and similar soils
Composition: About 5 percent
Landform: Flood plains

20—Brownsto-Castee complex, 3 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,400 to 7,400 feet (1,951 to 2,256 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Brownsto and similar soils: 50 percent
Castee and similar soils: 30 percent
Minor components: 20 percent

Component Descriptions

Brownsto soils

Landform: Breaks, plateaus
Parent material: Relict fluvial gravel deposits derived from mixed sources
Slope: 3 to 25 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 5.1 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 40 percent
Gypsum maximum: None
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 1 (slightly sodic)
Ecological site: Loamy 10-14" PPT

Potential native vegetation: Wyoming big sagebrush, bluebunch wheatgrass, shadscale saltbush, Indian ricegrass, Nevada bluegrass, bottlebrush squirreltail, needleandthread, prairie Junegrass, streambank wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; gravelly loam
3 to 14 inches; gravelly loam
14 to 29 inches; very cobbly loam
29 to 60 inches; very cobbly sandy loam

Castee soils

Landform: Breaks, plateaus
Parent material: Loess deposited on relict fluvial gravel deposits
Slope: 3 to 25 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 7.7 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 55 percent
Gypsum maximum: None
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Loamy
Potential native vegetation: Wyoming big sagebrush, bluebunch wheatgrass, shadscale saltbush, Indian ricegrass, Nevada bluegrass, bottlebrush squirreltail, needleandthread, prairie Junegrass, streambank wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 2 inches; loam
2 to 32 inches; loam
32 to 53 inches; gravelly loam
53 to 60 inches; gravelly sandy loam

Minor Components

Moderately deep soils over sandstone bedrock and similar soils
Composition: About 20 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)

21—Bulkley stony loam, 15 to 30 percent slopes, very stony

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,700 to 7,200 feet (2,042 to 2,194 meters)
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Bulkley and similar soils: 80 percent
Minor components: 20 percent

Component Descriptions

Bulkley soils

Landform: Hillslopes
Position on landform: Backslope, summit
Parent material: Colluvium derived from shale
Slope: 15 to 30 percent
Surface fragments: About 2 percent stones
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 8.8 inches (moderate)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Clayey Footslopes
Potential native vegetation: western wheatgrass, Wyoming big sagebrush, Nevada bluegrass, Utah serviceberry, bluebunch wheatgrass, mountain snowberry, muttongrass, prairie Junegrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 2 inches; stony loam
2 to 33 inches; clay
33 to 60 inches; clay loam

Minor Components

Moderately deep soils and similar soils
Composition: About 10 percent

Landform: Hillslopes
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)

Extremely stony soils and similar soils
Composition: About 10 percent
Landform: Hills
Position on landform: Shoulder

22—Bulkley silty clay, 3 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,200 to 7,000 feet (1,890 to 2,134 meters)
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Bulkley and similar soils: 80 percent
Minor components: 20 percent

Component Descriptions

Bulkley soils

Landform: Hills, alluvial fans
Position on landform: Toeslope
Parent material: Alluvium derived from shale
Slope: 3 to 12 percent
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 8.9 inches (moderate)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 10 percent
Gypsum maximum: About 1 percent
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Clayey Foothills
Potential native vegetation: western wheatgrass, Wyoming big sagebrush, bottlebrush squirreltail, prairie Junegrass
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 4 inches; silty clay
4 to 36 inches; clay
36 to 60 inches; silty clay

Minor Components

Pricecreek and similar soils
Composition: About 10 percent
Abor and similar soils
Composition: About 10 percent

23—Bulkley silty clay, 12 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,200 to 7,000 feet (1,890 to 2,134 meters)
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Bulkley and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Bulkley soils

Landform: Hills
Parent material: Residuum derived from shale
Slope: 12 to 25 percent
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 8.9 inches (moderate)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 10 percent
Gypsum maximum: About 1 percent
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Clayey Foothills
Potential native vegetation: western wheatgrass, Wyoming big sagebrush, bottlebrush squirreltail, prairie Junegrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 4 inches; silty clay

4 to 36 inches; clay
36 to 60 inches; silty clay

Minor Components

Abor and similar soils
Composition: About 10 percent

24—Bulkley-Quilt complex, 12 to 45 percent slopes

Map Unit Setting

Major Land Resource Area: 47
Elevation: 7,200 to 8,300 feet (2,195 to 2,530 meters)
Mean annual precipitation: 15 to 17 inches (381 to 432 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Bulkley and similar soils: 60 percent
Quilt and similar soils: 25 percent
Minor components: 15 percent

Component Descriptions

Bulkley soils

Landform: Hills
Position on landform: Backslope, summit
Parent material: Alluvium and residuum derived from shale
Slope: 12 to 45 percent
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 8.9 inches (moderate)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 10 percent
Gypsum maximum: About 1 percent
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Deep Clay Loam
Potential native vegetation: western wheatgrass, Letterman's needlegrass, Wyoming big sagebrush, muttongrass, slender wheatgrass, mountain snowberry, prairie Junegrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 3 inches; very channery clay loam
3 to 41 inches; clay
41 to 60 inches; clay

Quilt soils

Landform: Hills
Position on landform: Shoulder, backslope
Parent material: Colluvium and residuum derived from interbedded shale and sandstone
Slope: 20 to 45 percent
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 8.3 inches (moderate)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Very high
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam
Potential native vegetation: Letterman's needlegrass, mountain big sagebrush, elk sedge, mountain brome, mountain snowberry, nodding brome, prairie Junegrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 7 inches; channery loam
7 to 38 inches; channery clay loam
38 to 48 inches; channery clay
48 to 60 inches; channery clay

Minor Components

Morapos and similar soils
Composition: About 5 percent
Landform: Hills
Position on landform: Summit

Pagoda and similar soils
Composition: About 5 percent
Landform: Swales, hills
Position on landform: Footslope

Cochetopa and similar soils
Composition: About 5 percent

Landform: North-facing hills, swales
Position on landform: Backslope

25—Campspass fine sandy loam, 3 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,800 to 7,600 feet (2,073 to 2,316 meters)
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Freeze-free period: 65 to 85 days

Map Unit Composition

Campspass and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Campspass soils

Landform: Plateaus
Parent material: Residuum derived from sandstone and shale
Slope: 3 to 12 percent
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 9.7 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Very high
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Clayey Foothills
Potential native vegetation: western wheatgrass, mountain big sagebrush, streambank wheatgrass, prairie Junegrass, streambank wheatgrass
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 2 inches; fine sandy loam
2 to 8 inches; loam
8 to 20 inches; clay loam
20 to 60 inches; loam

Minor Components

Rock outcrop
Composition: About 5 percent

Morapos and similar soils
Composition: About 5 percent

26—Campspass fine sandy loam, 12 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,800 to 7,600 feet (2,073 to 2,316 meters)
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Freeze-free period: 65 to 85 days

Map Unit Composition

Campspass and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Campspass soils

Landform: Mountainsides
Parent material: Residuum derived from sandstone and shale
Slope: 12 to 25 percent
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 9.7 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Very high
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Clayey Foothills
Potential native vegetation: western wheatgrass, mountain big sagebrush, streambank wheatgrass, prairie Junegrass, streambank wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 2 inches; fine sandy loam
2 to 8 inches; loam
8 to 20 inches; clay loam
20 to 60 inches; loam

Minor Components

Rock outcrop
Composition: About 5 percent

Nortez and similar soils
Composition: About 5 percent

27—Canlodore very cobbly loamy sand, 15 to 40 percent slopes

Map Unit Setting

Major Land Resource Area: 47
Elevation: 7,800 to 9,200 feet (2,377 to 2,804 meters)
Mean annual precipitation: 18 to 20 inches (457 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Canlodore and similar soils: 95 percent
Minor components: 5 percent

Component Descriptions

Canlodore soils

Landform: Mountainsides
Parent material: Glacial deposits derived from sandstone and quartzite
Slope: 15 to 40 percent
Drainage class: Well drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Available water capacity: About 2.8 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Lodgepole Pine
Potential native vegetation:
Common trees: lodgepole pine
Other plants: elk sedge, Colorado wildrye, common juniper, grouse whortleberry, heartleaf arnica, spike trisetum
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 1 inch; moderately decomposed plant material
1 inch to 7 inches; very cobbly loamy sand
7 to 40 inches; very cobbly loamy sand
40 to 60 inches; very cobbly sand

Minor Components

Soils with clayey substratum and similar soils
Composition: About 5 percent
Landform: Convex and planar slopes on mountainsides

28—Carbol-Irigul-Rock outcrop complex, 3 to 25 percent slopes, very stony

Map Unit Setting

Major Land Resource Area: 47
Elevation: 7,500 to 8,500 feet (2,286 to 2,591 meters)
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Carbol and similar soils: 40 percent
Irigul and similar soils: 25 percent
Rock outcrop: 25 percent
Minor components: 10 percent

Component Descriptions

Carbol soils

Landform: Concave slopes on plateaus
Parent material: Residuum derived from sandstone
Slope: 3 to 8 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 1.9 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Dry Exposure
Potential native vegetation: black sagebrush, bluebunch wheatgrass, prairie Junegrass, streambank wheatgrass, western wheatgrass, Indian ricegrass, needleandthread
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 2 inches; sandy loam
2 to 14 inches; gravelly sandy clay loam
14 to 18 inches; unweathered bedrock

Irigul soils

Landform: Convex slopes on plateaus
Parent material: Residuum derived from sandstone
Slope: 3 to 25 percent
Surface fragments: About 2 percent stones
Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 1.5 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Dry Exposure
Potential native vegetation: black sagebrush, bluebunch wheatgrass, needleandthread, Indian ricegrass, prairie Junegrass, western wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 6 inches; channery loam
6 to 15 inches; very channery loam
15 to 19 inches; unweathered bedrock

Rock outcrop

Description: Rock outcrop consists of exposed hard sandstone bedrock. It occurs as convex bedrock covered with less than 4 inches of soil material and as ledges as high as twenty feet. The rock outcrop is on parallel linear cuestas and hogbacks.
Slope: 3 to 25 percent
Depth to restrictive feature: 0 inches to bedrock (lithic)
Available water capacity: About 0.0 inches (very low)
Runoff class: Very high
Salinity maximum: About 0 mmhos/cm (nonsaline)
Land capability subclass (nonirrigated): 8

Minor Components

Miracle and similar soils
Composition: About 10 percent
Landform: Concave slopes on plateaus

29—Carbol-Miracle complex, 3 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 47
Elevation: 7,500 to 8,500 feet (2,286 to 2,591 meters)
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Carbol and similar soils: 45 percent
Miracle and similar soils: 30 percent
Minor components: 25 percent

Component Descriptions

Carbol soils

Landform: Convex and concave areas on plateaus
Parent material: Residuum derived from sandstone
Slope: 3 to 12 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 1.9 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Dry Exposure
Potential native vegetation: black sagebrush, bluebunch wheatgrass, prairie Junegrass, streambank wheatgrass, western wheatgrass, Indian ricegrass, needleandthread
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 2 inches; sandy loam
2 to 14 inches; gravelly sandy clay loam
14 to 18 inches; unweathered bedrock

Miracle soils

Landform: Concave areas on plateaus
Parent material: Residuum derived from sandstone
Slope: 3 to 12 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained

Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 5.5 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 1 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam
Potential native vegetation: Letterman's needlegrass, slender wheatgrass, mountain big sagebrush, elk sedge, mountain brome, mountain snowberry, nodding brome
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 8 inches; sandy loam
8 to 37 inches; sandy clay loam
37 to 41 inches; unweathered bedrock

Minor Components

Irigul and similar soils
Composition: About 10 percent
Landform: Convex slopes on plateaus

Rock outcrop
Composition: About 8 percent

Coldspring and similar soils
Composition: About 7 percent
Landform: Concave slopes on plateaus

30—Carmody-Rock River-Crestman complex, 6 to 15 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 6,500 feet (1,829 to 1,981 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Carmody and similar soils: 35 percent
Rock River and similar soils: 30 percent
Crestman and similar soils: 20 percent
Minor components: 15 percent

Component Descriptions

Carmody soils

Landform: Plateaus, hillslopes
Parent material: Residuum derived from sandstone
Slope: 6 to 15 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 3.0 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Rolling Loam
Potential native vegetation: Wyoming big sagebrush, needleandthread, western wheatgrass, Indian ricegrass, Nevada bluegrass, bluebunch wheatgrass, bottlebrush squirreltail, prairie Junegrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; loamy fine sand
3 to 23 inches; fine sandy loam
23 to 27 inches; weathered bedrock

Rock River soils

Landform: Hillslopes, plateaus
Parent material: Residuum derived from sandstone
Slope: 6 to 15 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 7.5 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Rolling Loam
Potential native vegetation: Wyoming big sagebrush, needleandthread, Indian ricegrass, western wheatgrass, Nevada bluegrass, bottlebrush squirreltail, prairie Junegrass
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 3 inches; sandy loam
3 to 22 inches; sandy clay loam
22 to 32 inches; sandy clay loam
32 to 60 inches; sandy loam

Crestman soils

Landform: Plateaus, hillslopes
Parent material: Residuum derived from sandstone
Slope: 6 to 15 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)
Drainage class: Excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Available water capacity: About 1.0 inch (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Rolling Loam
Potential native vegetation: Wyoming big sagebrush, needleandthread, Sandberg bluegrass, western wheatgrass, Indian ricegrass, bluebunch wheatgrass, bottlebrush squirreltail, prairie Junegrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 2 inches; loamy sand
2 to 14 inches; gravelly loamy sand
14 to 18 inches; weathered bedrock

Minor Components

Ryan Park and similar soils
Composition: About 5 percent

Grieves and similar soils
Composition: About 5 percent

Cushool and similar soils
Composition: About 5 percent

31—Castee loam, 3 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,500 to 7,300 feet (1,981 to 2,225 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Castee and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Castee soils

Landform: Plateaus
Parent material: Loess deposited on relict fluvial gravel deposits
Slope: 3 to 12 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 7.7 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 50 percent
Gypsum maximum: None
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Loamy 10-14" PPT
Potential native vegetation: Wyoming big sagebrush, bluebunch wheatgrass, shadscale saltbush, Indian ricegrass, Nevada bluegrass, bottlebrush squirreltail, needleandthread, prairie Junegrass, streambank wheatgrass
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 2 inches; loam
2 to 32 inches; loam
32 to 53 inches; gravelly loam
53 to 60 inches; gravelly sandy loam

Minor Components

Brownsto and similar soils
Composition: About 10 percent

32—Chroder sandy loam, 3 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,400 to 6,000 feet (1,646 to 1,829 meters)
Mean annual precipitation: 7 to 10 inches (178 to 254 millimeters)

Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Freeze-free period: 90 to 105 days

Map Unit Composition

Chroder and similar soils: 80 percent
Minor components: 20 percent

Component Descriptions

Chroder soils

Landform: Plateaus
Parent material: Eolian deposits
Slope: 3 to 12 percent
Drainage class: Well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 7.1 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 30 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Loamy Cold Desert
Potential native vegetation: Wyoming big sagebrush, needleandthread, Indian ricegrass, bottlebrush squirreltail, streambank wheatgrass, western wheatgrass, shadscale saltbush
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; sandy loam
3 to 10 inches; sandy loam
10 to 60 inches; sandy loam

Minor Components

Tipperary and similar soils
Composition: About 10 percent
Landform: Dunes

Clifsand and similar soils
Composition: About 10 percent
Landform: Windswept convex slopes near escarpments

33—Clayburn loam, warm, 3 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 7,000 to 8,600 feet (2,134 to 2,621 meters)
Mean annual precipitation: 18 to 20 inches (457 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Clayburn and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Clayburn soils

Landform: Plateaus, mountainsides
Parent material: Colluvium and residuum derived from sandstone and shale
Slope: 3 to 25 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 10.6 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: High
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam
Potential native vegetation: Letterman's needlegrass, slender wheatgrass, mountain big sagebrush, Saskatoon serviceberry, elk sedge, mountain brome, mountain snowberry, nodding brome
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 11 inches; loam
11 to 46 inches; clay loam
46 to 60 inches; loam

Minor Components

Routt and similar soils
Composition: About 8 percent

Jerry and similar soils
Composition: About 7 percent

34—Clayburn-Foidel complex, 25 to 55 percent slopes, very bouldery

Map Unit Setting

Major Land Resource Area: 48A

Elevation: 7,170 to 9,000 feet (2,184 to 2,743 meters)
Mean annual precipitation: 18 to 20 inches (457 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Clayburn and similar soils: 40 percent
Foidel and similar soils: 30 percent
Minor components: 30 percent

Component Descriptions

Clayburn soils

Landform: Mountainsides
Parent material: Colluvium derived from sandstone
Slope: 25 to 55 percent, southern aspect
Surface fragments: About 1 percent stones, about 1 percent boulders
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 8.8 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Brushy Loam
Potential native vegetation: Gambel's oak, Letterman's needlegrass, elk sedge, mountain brome, Saskatoon serviceberry, mountain snowberry, slender wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 17 inches; fine sandy loam
17 to 31 inches; sandy clay loam
31 to 60 inches; fine sandy loam

Foidel soils

Landform: Mountainsides
Parent material: Colluvium derived from sandstone
Slope: 25 to 55 percent, northern aspect
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 9.2 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: High
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Aspen Woodland
Potential native vegetation:
Common trees: quaking aspen
Other plants: Porter's licoriceroot, blue wildrye, mountain brome, mountain snowberry, American vetch, Fendler's meadowrue, Saskatoon serviceberry, silvery lupine
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 13 inches; fine sandy loam
13 to 33 inches; fine sandy loam
33 to 60 inches; sandy clay loam

Minor Components

Youga and similar soils
Composition: About 15 percent

Soils with thin nonmollic surface layer and similar soils
Composition: About 15 percent

35—Clayburn-Youga, moist complex, 15 to 45 percent slopes

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 7,000 to 7,800 feet (2,134 to 2,377 meters)
Mean annual precipitation: 18 to 20 inches (457 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Clayburn and similar soils: 45 percent
Youga and similar soils: 35 percent
Minor components: 20 percent

Component Descriptions

Clayburn soils

Landform: Mountainsides
Position on landform: Footslope
Parent material: Colluvium and residuum derived from sandstone
Slope: 15 to 45 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)

Available water capacity: About 10.6 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Very high
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Brushy Loam
Potential native vegetation: Gambel's oak, Saskatoon serviceberry, mountain brome, Letterman's needlegrass, elk sedge, mountain snowberry, nodding brome, slender wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 17 inches; loam
17 to 50 inches; clay loam
50 to 60 inches; sandy clay loam

Youga soils

Landform: Mountainsides
Position on landform: Backslope, summit
Parent material: Residuum and colluvium derived from sandstone
Slope: 15 to 45 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 10.8 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Very high
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Brushy Loam
Potential native vegetation: Gambel's oak, Saskatoon serviceberry, elk sedge, mountain brome, Letterman's needlegrass, common chokecherry, mountain snowberry, nodding brome, slender wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 1 inch; slightly decomposed plant material
1 inch to 14 inches; loam
14 to 40 inches; clay loam
40 to 60 inches; sandy clay loam

Minor Components

Moderately deep soils over sandstone bedrock on crests and similar soils
Composition: About 7 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)

Cochetopa and similar soils
Composition: About 7 percent
Landform: Mountainsides
Position on landform: Footslope

Foidel and similar soils
Composition: About 6 percent
Landform: Mountainsides
Position on landform: Toeslope, footslope

36—Clifsand-Chroder complex, 3 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,400 to 6,000 feet (1,646 to 1,829 meters)
Mean annual precipitation: 7 to 10 inches (178 to 254 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Freeze-free period: 90 to 105 days

Map Unit Composition

Clifsand and similar soils: 60 percent
Chroder and similar soils: 30 percent
Minor components: 10 percent

Component Descriptions

Clifsand soils

Landform: Fan terraces
Parent material: Alluvium derived from sedimentary rocks
Slope: 3 to 12 percent
Drainage class: Well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 3.9 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 35 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)

Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Loamy Cold Desert
Potential native vegetation: Wyoming big sagebrush, needleandthread, Indian ricegrass, bottlebrush squirreltail, streambank wheatgrass, shadscale saltbush, western wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 2 inches; loamy sand
2 to 13 inches; sandy loam
13 to 43 inches; very cobbly sandy loam
43 to 60 inches; extremely stony sand

Chroder soils

Landform: Fan terraces
Parent material: Eolian deposits
Slope: 3 to 12 percent
Drainage class: Well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 7.1 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 30 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Loamy Cold Desert
Potential native vegetation: Wyoming big sagebrush, needleandthread, Indian ricegrass, bottlebrush squirreltail, streambank wheatgrass, western wheatgrass, shadscale saltbush
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; loamy sand
3 to 10 inches; sandy loam
10 to 43 inches; sandy loam
43 to 65 inches; sandy loam

Minor Components

Tipperary and similar soils
Composition: About 10 percent
Landform: Dunes

37—Cochetopa loam, 12 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 7,200 to 8,300 feet (2,195 to 2,530 meters)
Mean annual precipitation: 18 to 20 inches (457 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Cochetopa and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Cochetopa soils

Landform: Mountainsides
Parent material: Residuum derived from sandstone and shale
Slope: 12 to 25 percent
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 11.0 inches (high)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam
Potential native vegetation: slender wheatgrass, Letterman's needlegrass, mountain big sagebrush, elk sedge, mountain brome, mountain snowberry, nodding brome
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 11 inches; loam
11 to 19 inches; clay loam
19 to 48 inches; clay loam
48 to 60 inches; clay loam

Minor Components

Jerry and similar soils
Composition: About 8 percent
Routt and similar soils
Composition: About 7 percent

38—Cochetopa loam, 25 to 65 percent slopes

Map Unit Setting

Major Land Resource Area: 48A

Elevation: 7,200 to 8,500 feet (2,195 to 2,591 meters)
Mean annual precipitation: 18 to 20 inches (457 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Cochetopa and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Cochetopa soils

Landform: Mountainsides
Parent material: Residuum derived from sandstone and shale
Slope: 25 to 65 percent
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 10.8 inches (high)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Brushy Loam
Potential native vegetation: Gambel's oak, Letterman's needlegrass, Saskatoon serviceberry, Woods' rose, elk sedge, mountain brome, mountain snowberry, nodding brome, slender wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 19 inches; loam
19 to 48 inches; clay loam
48 to 60 inches; clay loam

Minor Components

Rock outcrop
Composition: About 5 percent

Shallow soils over sandstone bedrock and similar soils
Composition: About 5 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)

Jerry and similar soils
Composition: About 5 percent

39—Cochetopa loam, warm, 3 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 7,000 to 8,300 feet (2,134 to 2,530 meters)
Mean annual precipitation: 18 to 20 inches (457 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Cochetopa and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Cochetopa soils

Landform: Hillslopes, plateaus
Parent material: Residuum derived from sandstone and shale
Slope: 3 to 12 percent
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 11.0 inches (high)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam
Potential native vegetation: slender wheatgrass, Letterman's needlegrass, mountain big sagebrush, elk sedge, mountain brome, mountain snowberry, nodding brome
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 11 inches; loam
11 to 19 inches; clay loam
19 to 48 inches; clay loam
48 to 60 inches; clay loam

Minor Components

Jerry and similar soils
Composition: About 8 percent

Routt and similar soils
Composition: About 7 percent

40—Cochetopa-Gothic complex, 10 to 25 percent slopes, extremely bouldery

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 7,200 to 8,200 feet (2,195 to 2,499 meters)
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Cochetopa and similar soils: 45 percent
Gothic and similar soils: 40 percent
Minor components: 15 percent

Component Descriptions

Cochetopa soils

Landform: Mountainsides
Parent material: Colluvium derived from shale
Slope: 10 to 15 percent
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 10.8 inches (high)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam
Potential native vegetation: slender wheatgrass, Letterman's needlegrass, mountain big sagebrush, elk sedge, mountain brome, mountain snowberry, nodding brome
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 19 inches; loam
19 to 48 inches; clay loam
48 to 60 inches; clay loam

Gothic soils

Landform: Mountainsides
Parent material: Colluvium derived from shale
Slope: 15 to 25 percent
Surface fragments: About 8 percent boulders, about 10 percent stones
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 8.6 inches (moderate)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 1 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Brushy Loam
Potential native vegetation: Gambel's oak, Saskatoon serviceberry, Letterman's needlegrass, Woods' rose, elk sedge, mountain brome, mountain snowberry, nodding brome
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 12 inches; very bouldery loam
12 to 17 inches; cobbly clay loam
17 to 42 inches; clay
42 to 60 inches; gravelly clay

Minor Components

Routt and similar soils
Composition: About 8 percent
Slope: 10 to 15 percent

Binco and similar soils
Composition: About 7 percent

41—Cochetopa-Gothic complex, 25 to 45 percent slopes, extremely stony

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 7,200 to 8,200 feet (2,195 to 2,499 meters)
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Cochetopa and similar soils: 40 percent
Gothic and similar soils: 35 percent
Minor components: 25 percent

Component Descriptions

Cochetopa soils

Landform: Mountainsides
Parent material: Colluvium derived from shale
Slope: 25 to 45 percent

Surface fragments: About 8 percent stones, about 5 percent boulders
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 10.2 inches (high)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: High
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Brushy Loam
Potential native vegetation: Gambel's oak, Letterman's needlegrass, Saskatoon serviceberry, Woods' rose, elk sedge, mountain brome, mountain snowberry, nodding brome, slender wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 21 inches; stony loam
21 to 51 inches; clay
51 to 60 inches; clay loam

Gothic soils

Landform: Mountainsides
Parent material: Colluvium derived from shale
Slope: 25 to 45 percent
Surface fragments: About 8 percent stones, about 5 percent boulders
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 8.9 inches (moderate)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 1 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Brushy Loam
Potential native vegetation: Gambel's oak, Saskatoon serviceberry, Letterman's needlegrass, Woods' rose, elk sedge, mountain brome, mountain snowberry, nodding brome
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 12 inches; stony loam
12 to 17 inches; cobbly clay loam
17 to 42 inches; clay
42 to 60 inches; gravelly clay

Minor Components

Binco and similar soils
Composition: About 13 percent

Soils that are extremely stony throughout and similar soils
Composition: About 12 percent

42—Cochetopa-Jerry complex, 3 to 15 percent slopes, extremely stony

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 7,000 to 8,100 feet (2,134 to 2,469 meters)
Mean annual precipitation: 16 to 20 inches (406 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Cochetopa and similar soils: 50 percent
Jerry and similar soils: 35 percent
Minor components: 15 percent

Component Descriptions

Cochetopa soils

Landform: Concave positions on plateaus
Parent material: Residuum derived from shale
Slope: 3 to 15 percent, northern to northeastern aspects
Surface fragments: About 2 percent stones
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 10.8 inches (high)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam
Potential native vegetation: slender wheatgrass, Letterman's needlegrass, mountain big sagebrush, elk sedge, mountain brome, mountain snowberry, nodding brome
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 19 inches; loam
19 to 48 inches; clay loam
48 to 60 inches; clay loam

Jerry soils

Landform: Convex positions on plateaus
Parent material: Residuum derived from shale
Slope: 3 to 15 percent, western to southern aspects
Surface fragments: ,
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 8.9 inches (moderate)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 2 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Stony Loam
Potential native vegetation: bluebunch wheatgrass, Utah serviceberry, mountain big sagebrush, Letterman's needlegrass, bottlebrush squirreltail, mountain snowberry, muttongrass, western wheatgrass
Land capability subclass (nonirrigated): 6s

Typical Profile:
0 to 10 inches; very stony loam
10 to 31 inches; clay
31 to 60 inches; clay loam

Minor Components

Routt and similar soils
Composition: About 5 percent
Landform: Swales

Foidel and similar soils
Composition: About 5 percent
Landform: Swales

Binco and similar soils
Composition: About 5 percent
Landform: Ridges, knolls

43—Coldspring loam, moist, 1 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 47
Elevation: 7,500 to 8,500 feet (2,286 to 2,591 meters)
Mean annual precipitation: 18 to 20 inches (457 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Coldspring and similar soils: 80 percent
Minor components: 20 percent

Component Descriptions

Coldspring soils

Landform: Plateaus
Parent material: Residuum derived from sandstone
Slope: 1 to 12 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 7.6 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Aspen Woodland
Potential native vegetation:
Common trees: quaking aspen
Other plants: quaking aspen, mountain brome, nodding brome, common juniper, elk sedge, mountain snowberry, slender wheatgrass
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 14 inches; loam
14 to 34 inches; clay loam
34 to 47 inches; gravelly sandy clay loam
47 to 51 inches; unweathered bedrock

Minor Components

Moderately well drained soils on concave slopes and similar soils
Composition: About 5 percent
Drainage class: Moderately well drained

Miracle and similar soils
Composition: About 5 percent
Landform: Convex slopes on plateaus

Carbol and similar soils
Composition: About 5 percent
Landform: Convex slopes on plateaus

Very deep clayey soils and similar soils
Composition: About 3 percent

Cryaquolls and similar soils
Composition: About 2 percent
Landform: Depressions

44—Cowestglen sandy loam, 0 to 3 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 6,800 feet (1,829 to 2,073 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Cowestglen and similar soils: 80 percent
Minor components: 20 percent

Component Descriptions

Cowestglen soils

Landform: Terraces, flood plains
Parent material: Alluvium derived from mixed sources
Slope: 0 to 3 percent
Drainage class: Well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 7.6 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Flooding hazard: Rare
Runoff class: Very low
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 8 (slightly sodic)
Ecological site: Foothill Swale
Potential native vegetation: basin wildrye, basin big sagebrush, western wheatgrass
Land capability subclass (irrigated): 4c
Land capability subclass (nonirrigated): 4c
Typical Profile:
0 to 5 inches; sandy loam
5 to 42 inches; stratified sand to loam
42 to 60 inches; stratified sand to loam

Minor Components

Lander and similar soils
Composition: About 5 percent

Battlement and similar soils
Composition: About 5 percent

Battlement and similar soils
Composition: About 5 percent

Soils with extremely gravelly coarse sand substratum and similar soils
Composition: About 5 percent
Landform: Yampa River near Craig and big bottom flood-plain steps

45—Coyet loamy sand, 3 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,800 to 6,800 feet (1,768 to 2,073 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Coyet and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Coyet soils

Landform: Alluvial fans, hillslopes
Parent material: Eolian deposits and alluvium derived from sandstone
Slope: 3 to 12 percent
Drainage class: Excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 5.2 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 10 percent

Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 3 (slightly sodic)
Ecological site: Sandhills
Potential native vegetation: antelope bitterbrush, needleandthread, silver sagebrush, Indian ricegrass, Wyoming big sagebrush, galleta, prairie Junegrass, sand dropseed, prairie sagewort
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 6 inches; loamy sand
6 to 22 inches; loamy sand
22 to 60 inches; loamy sand

Minor Components

Grieves and similar soils
Composition: About 10 percent

46—Coyet loamy sand, 12 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,800 to 6,800 feet (1,768 to 2,073 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Coyet and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Coyet soils

Landform: Hillslopes
Parent material: Eolian deposits and alluvium derived from sandstone
Slope: 12 to 25 percent
Drainage class: Excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 5.2 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 3 (slightly sodic)
Ecological site: Sandhills
Potential native vegetation: antelope bitterbrush, needleandthread, silver sagebrush, Indian ricegrass, Wyoming big sagebrush, galleta, prairie Junegrass, sand dropseed, prairie sagewort
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 6 inches; loamy sand
6 to 22 inches; loamy sand
22 to 60 inches; loamy sand

Minor Components

Grieves and similar soils
Composition: About 8 percent

Deep soils over sandstone bedrock and similar soils
Composition: About 7 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)

47—Coyet-Crestman, moist complex, 20 to 50 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 7,200 feet (1,829 to 2,195 meters)
Mean annual precipitation: 13 to 14 inches (330 to 356 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Coyet and similar soils: 45 percent
Crestman and similar soils: 35 percent
Minor components: 20 percent

Component Descriptions

Coyet soils

Landform: Hillslopes
Parent material: Alluvium and residuum derived from sandstone
Slope: 20 to 50 percent

Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)
Drainage class: Excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 4.1 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandy Foothills
Potential native vegetation: needleandthread, Wyoming big sagebrush, Indian ricegrass, antelope bitterbrush, western wheatgrass, prairie Junegrass, sand dropseed, silver sagebrush
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 3 inches; loamy sand
3 to 15 inches; loamy sand
15 to 48 inches; sand
48 to 52 inches; weathered bedrock

Crestman soils

Landform: Hillslopes
Parent material: Residuum derived from sandstone
Slope: 20 to 50 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)
Drainage class: Excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 1.0 inch (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Loamy Breaks
Potential native vegetation: Wyoming big sagebrush, western wheatgrass, antelope bitterbrush, Indian ricegrass, Sandberg bluegrass, Truckee rabbitbrush, bluebunch wheatgrass, bottlebrush squirreltail, needleandthread, prairie Junegrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 2 inches; loamy sand
2 to 14 inches; gravelly loamy sand
14 to 18 inches; weathered bedrock

Minor Components

Gracot and similar soils
Composition: About 4 percent

Carmody and similar soils
Composition: About 4 percent

Moyerson and similar soils
Composition: About 4 percent

Cushool and similar soils
Composition: About 4 percent

Rock outcrop
Composition: About 4 percent

48—Crago-Pensore-Grapit association, 6 to 75 percent slopes

Map Unit Setting

Major Land Resource Area: 47
Elevation: 6,500 to 8,500 feet (1,981 to 2,591 meters)
Mean annual precipitation: 13 to 14 inches (330 to 356 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Crago and similar soils: 35 percent
Pensore and similar soils: 35 percent
Grapit and similar soils: 15 percent
Minor components: 15 percent

Component Descriptions

Crago soils

Landform: Hills
Position on landform: Backslope
Parent material: Colluvium derived from limestone
Slope: 15 to 75 percent, southern aspect
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 4.2 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 60 percent
Gypsum maximum: None

Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Juniperus osteosperma-Pinus edulis/ Pleuraphis jamesii
Potential native vegetation:
Common trees: Utah juniper, twoneedle pinyon
Other plants: Wyoming big sagebrush, bluebunch wheatgrass, prairie Junegrass, true mountain mahogany, western wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 2 inches; very cobbly loam
2 to 57 inches; very gravelly loam
57 to 60 inches; very cobbly loam

Pensore soils

Landform: Hills
Position on landform: Summit, backslope
Parent material: Residuum derived from limestone
Slope: 6 to 45 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 1.6 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 60 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Juniperus osteosperma-Pinus edulis/ Pleuraphis jamesii
Potential native vegetation:
Common trees: Utah juniper, twoneedle pinyon
Other plants: bluebunch wheatgrass, black sagebrush, Indian ricegrass, prairie Junegrass, western wheatgrass, needleandthread
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 2 inches; gravelly loam
2 to 7 inches; gravelly loam
7 to 17 inches; very gravelly loam
17 to 21 inches; unweathered bedrock

Grapit soils

Landform: Hills
Position on landform: Backslope
Parent material: Colluvium derived from limestone
Slope: 12 to 75 percent, northern aspect
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 6.0 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 65 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Juniperus osteosperma-Pinus edulis/ Pleuraphis jamesii
Potential native vegetation:
Common trees: Utah juniper, twoneedle pinyon
Other plants: bluebunch wheatgrass, mountain big sagebrush, stemless goldenweed, Saskatoon serviceberry, prairie Junegrass, true mountain mahogany, western wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 3 inches; channery loam
3 to 38 inches; very channery loam
38 to 60 inches; very channery clay loam

Minor Components

Rock outcrop
Composition: About 5 percent
Landform: Escarpments, dipslopes

Emlin and similar soils
Composition: About 5 percent
Landform: Drainageways, hills
Position on landform: Footslope

Moderately deep to deep clayey soils and similar soils
Composition: About 5 percent
Landform: Hills
Position on landform: Backslope
Depth to restrictive feature: 20 to 60 inches to bedrock (lithic)

49—Cryoborolls, slumped, 15 to 50 percent slopes

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 7,200 to 8,500 feet (2,194 to 2,591 meters)

Mean annual precipitation: 18 to 20 inches (457 to 508 millimeters)
Mean annual air temperature: 37 to 42 degrees F. (2.8 to 5.6 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Cryoborolls and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Cryoborolls soils

Landform: Landslides on mountainsides
Parent material: Colluvium derived from interbedded sandstone and shale
Slope: 15 to 50 percent
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 9.1 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Very high
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Potential native vegetation: Columbia needlegrass, Gambel's oak, elk sedge, slender wheatgrass, Saskatoon serviceberry, letterman needlegrass, mountain brome, mountain snowberry, nodding bromegrass, quaking aspen
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 7 inches; clay loam
7 to 35 inches; clay
35 to 60 inches; clay loam

Minor Components

Soils that do not have a dark colored surface and similar soils
Composition: About 8 percent

Haplaquolls and similar soils
Composition: About 7 percent

50—Cushool fine sandy loam, 3 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 6,800 feet (1,829 to 2,073 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Cushool and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Cushool soils

Landform: Plateaus, hillslopes
Parent material: Residuum derived from sandstone
Slope: 3 to 12 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 3.8 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Rolling Loam
Potential native vegetation: big sagebrush, needleandthread, western wheatgrass, prairie Junegrass, Indian ricegrass, Sandberg bluegrass, bluebunch wheatgrass
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 5 inches; fine sandy loam
5 to 14 inches; sandy clay loam
14 to 25 inches; fine sandy loam
25 to 29 inches; unweathered bedrock

Minor Components

Coyet and similar soils
Composition: About 8 percent

Rock River and similar soils
Composition: About 7 percent

51—Cushool fine sandy loam, 12 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 6,800 feet (1,829 to 2,073 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Cushool and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Cushool soils

Landform: Hillslopes
Parent material: Residuum derived from sandstone
Slope: 12 to 25 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 3.8 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Rolling Loam
Potential native vegetation: big sagebrush, needleandthread, western wheatgrass, prairie Junegrass, Indian ricegrass, Sandberg bluegrass, bluebunch wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 5 inches; fine sandy loam
5 to 14 inches; sandy clay loam
14 to 25 inches; fine sandy loam
25 to 29 inches; unweathered bedrock

Minor Components

Coyet and similar soils
Composition: About 8 percent

Rock River and similar soils
Composition: About 7 percent

52—Danavore-Waybe complex, 5 to 30 percent slopes

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 7,200 to 8,600 feet (2,194 to 2,621 meters)
Mean annual precipitation: 18 to 20 inches (457 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Danavore and similar soils: 45 percent
Waybe and similar soils: 30 percent
Minor components: 25 percent

Component Descriptions

Danavore soils

Landform: Narrow mountainsides, ridges
Position on landform: Summit
Parent material: Residuum derived from interbedded sandstone and shale
Slope: 5 to 30 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 1.5 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 3 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Dry Exposure
Potential native vegetation: black sagebrush, bluebunch wheatgrass, western wheatgrass,

bottlebrush squirreltail, needleandthread, prairie Junegrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 4 inches; very cobbly sandy loam
4 to 8 inches; extremely stony sandy loam
8 to 22 inches; extremely channery loam
22 to 26 inches; weathered bedrock

Waybe soils

Landform: Narrow mountainsides, ridges
Position on landform: Summit
Parent material: Residuum derived from shale
Slope: 5 to 30 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 2.1 inches (very low)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Dry Exposure
Potential native vegetation: bluebunch wheatgrass, black sagebrush, bottlebrush squirreltail, western wheatgrass, needleandthread, prairie Junegrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 4 inches; channery silty clay loam
4 to 15 inches; silty clay loam
15 to 19 inches; weathered bedrock

Minor Components

Rock outcrop
Composition: About 13 percent

Soils similar to Danavore with dark colored surface layers and similar soils
Composition: About 12 percent

53—Davtone-Forsey complex, 12 to 35 percent slopes, very stony

Map Unit Setting

Major Land Resource Area: 47
Elevation: 7,000 to 9,000 feet (2,134 to 2,743 meters)
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Davtone and similar soils: 45 percent
Forsey and similar soils: 30 percent
Minor components: 25 percent

Component Descriptions

Davtone soils

Landform: Concave and planar positions on mountainsides
Parent material: Alluvium and colluvium derived from sandstone
Slope: 12 to 35 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 9.8 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam
Potential native vegetation: Letterman's needlegrass, slender wheatgrass, mountain big sagebrush, Utah serviceberry, mountain brome, mountain snowberry
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 6 inches; loam
6 to 17 inches; clay loam

17 to 30 inches; clay loam
30 to 60 inches; cobbly loam

Forsey soils

Landform: Convex positions on mountainsides
Parent material: Relict fluvial deposits derived from sandstone and quartzite
Slope: 12 to 35 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 3.8 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Dry Exposure
Potential native vegetation: black sagebrush, bluebunch wheatgrass, needleandthread, Indian ricegrass, prairie Junegrass, bottlebrush squirreltail, western wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 8 inches; cobbly sandy loam
8 to 24 inches; very cobbly sandy clay loam
24 to 60 inches; very cobbly sandy loam

Minor Components

Morset and similar soils
Composition: About 10 percent
Landform: Planar slopes on mountainsides

Very cobbly, moderately deep soils and similar soils
Composition: About 8 percent
Landform: Convex slopes on mountainsides
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)

Forsey and similar soils
Composition: About 7 percent
Landform: Convex slopes on mountainsides

54—Deaver-Avalon complex, 5 to 45 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,500 to 6,100 feet (1,676 to 1,859 meters)
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Freeze-free period: 90 to 105 days

Map Unit Composition

Deaver and similar soils: 50 percent
Avalon and similar soils: 30 percent
Minor components: 20 percent

Component Descriptions

Deaver soils

Landform: Hillslopes
Parent material: Residuum derived from shale
Slope: 15 to 45 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 4.5 inches (low)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 15 percent
Gypsum maximum: About 10 percent
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 10 (slightly sodic)
Ecological site: Clayey Slopes
Potential native vegetation: western wheatgrass, saline wildrye, shadscale saltbush, Indian ricegrass, Sandberg bluegrass, bottlebrush squirreltail, prairie Junegrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 2 inches; gravelly silty clay loam
2 to 30 inches; silty clay
30 to 34 inches; weathered bedrock

Avalon soils

Landform: Benches, hills
Position on landform: Summit
Parent material: Eolian deposits
Slope: 5 to 12 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 8.9 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)

Runoff class: High
Calcium carbonate maximum: About 40 percent
Gypsum maximum: None
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 3 (slightly sodic)
Ecological site: Semidesert Loam
Potential native vegetation: Wyoming big sagebrush, shadscale saltbush, western wheatgrass, Indian ricegrass, bottlebrush squirreltail, fourwing saltbush, needleandthread, saline wildrye
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 3 inches; loam
3 to 12 inches; clay loam
12 to 60 inches; clay loam

Minor Components

Mack and similar soils
Composition: About 7 percent
Landform: Benches

Chipeta and similar soils
Composition: About 7 percent
Landform: Hillsides

Avalon and similar soils
Composition: About 6 percent
Landform: Benches

55—Deaver-Chipeta complex, 3 to 35 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,400 to 6,100 feet (1,646 to 1,859 meters)
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Freeze-free period: 90 to 105 days

Map Unit Composition

Deaver and similar soils: 60 percent
Chipeta and similar soils: 30 percent
Minor components: 10 percent

Component Descriptions

Deaver soils

Landform: Hills
Position on landform: Backslope, footslope
Parent material: Residuum derived from shale
Slope: 3 to 35 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 5.4 inches (low)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 15 percent
Gypsum maximum: About 10 percent
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 10 (slightly sodic)
Ecological site: Clayey Saltdesert
Potential native vegetation: saltbush, shadscale saltbush, galleta, mat saltbush, Indian ricegrass, bottlebrush squirreltail, saline wildrye
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 2 inches; silty clay loam
2 to 35 inches; silty clay
35 to 39 inches; weathered bedrock

Chipeta soils

Landform: Hills
Position on landform: Summit, backslope
Parent material: Residuum derived from shale
Slope: 3 to 35 percent
Depth to restrictive feature: 5 to 20 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 2.7 inches (very low)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 15 percent
Gypsum maximum: About 10 percent
Salinity maximum: About 8 mmhos/cm (slightly saline)
Sodium adsorption ratio maximum: About 10 (slightly sodic)
Ecological site: Clayey Saltdesert
Potential native vegetation: saltbush, saline wildrye, mat saltbush, Indian ricegrass, bottlebrush squirreltail, shadscale saltbush, western wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 1 inch; silty clay loam

1 inch to 17 inches; silty clay
17 to 21 inches; weathered bedrock

Minor Components

Massadona and similar soils
Composition: About 10 percent

56—Debone loam, 0 to 3 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,700 to 6,400 feet (1,737 to 1,951 meters)
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Debone and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Debone soils

Landform: Stream terraces
Parent material: Alluvium derived from shale and sandstone
Slope: 0 to 3 percent
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 6.5 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 15 percent
Gypsum maximum: About 3 percent
Salinity maximum: About 16 mmhos/cm (moderately saline)
Sodium adsorption ratio maximum: About 30 (strongly sodic)
Ecological site: Alkaline Slopes
Potential native vegetation: greasewood, shadscale saltbush, Wyoming big sagebrush, bottlebrush squirreltail, western wheatgrass, Indian ricegrass, bud sagebrush, galleta
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 3 inches; loam
3 to 14 inches; clay
14 to 35 inches; clay loam
35 to 60 inches; fine sandy loam

Minor Components

Soils with loam and clay loam substratum and similar soils
Composition: About 5 percent

Quelman and similar soils
Composition: About 5 percent
Landform: Narrow flood plains

57—Detra-Cortyzack complex, 1 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 47
Elevation: 6,800 to 7,800 feet (2,073 to 2,377 meters)
Mean annual precipitation: 15 to 17 inches (381 to 432 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Detra and similar soils: 50 percent
Cortyzack and similar soils: 40 percent
Minor components: 10 percent

Component Descriptions

Detra soils

Landform: Hills, alluvial fans
Position on landform: Toeslope
Parent material: Alluvium derived from sandstone
Slope: 1 to 12 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 9.0 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Medium
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam
Potential native vegetation: Letterman's needlegrass, slender wheatgrass, mountain big sagebrush, elk sedge, mountain brome, mountain snowberry, nodding brome
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 19 inches; fine sandy loam

19 to 50 inches; sandy clay loam
50 to 60 inches; sandy clay loam

Cortyzack soils

Landform: Hills
Position on landform: Toeslope
Parent material: Eolian deposits and alluvium derived from sandstone
Slope: 1 to 12 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 9.8 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 30 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Deep Loam
Potential native vegetation: mountain big sagebrush, needleandthread, western wheatgrass, Indian ricegrass, Saskatoon serviceberry, basin wildrye, mountain snowberry, muttongrass, prairie Junegrass
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 9 inches; fine sandy loam
9 to 24 inches; sandy clay loam
24 to 45 inches; sandy clay loam
45 to 60 inches; sandy clay loam

Minor Components

Moderately deep soils and similar soils
Composition: About 10 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)

58—Diaflats-Fondillas complex, 2 to 15 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,600 to 7,200 feet (2,012 to 2,195 meters)
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days
Note: In the vicinity of Godiva Rim, this map unit consists mostly of the Fondillas soil.

Map Unit Composition

Diaflats and similar soils: 45 percent
Fondillas and similar soils: 35 percent
Minor components: 20 percent

Component Descriptions

Diaflats soils

Landform: Planar and concave slopes on dissected plateaus
Parent material: Residuum derived from fine grained sandstone and siltstone
Slope: 2 to 15 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 4.2 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Loamy 7-10" PPT
Potential native vegetation: Wyoming big sagebrush, Indian ricegrass, needleandthread, shadscale saltbush, streambank wheatgrass, bottlebrush squirreltail, streambank wheatgrass, western wheatgrass
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 2 inches; loam
2 to 26 inches; loam
26 to 30 inches; unweathered bedrock

Fondillas soils

Landform: Planar and convex slopes on dissected plateaus
Parent material: Residuum derived from fine grained sandstone and siltstone
Slope: 2 to 15 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 1.3 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 10 percent
Gypsum maximum: About 1 percent

Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 3 (slightly sodic)
Ecological site: Loamy 7-10" PPT
Potential native vegetation: Wyoming big sagebrush, Indian ricegrass, needleandthread, shadscale saltbush, streambank wheatgrass, bluebunch wheatgrass, streambank wheatgrass, western wheatgrass
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 5 inches; loam
5 to 11 inches; extremely flaggy loam
11 to 15 inches; unweathered bedrock

Minor Components

Rogrube and similar soils
Composition: About 8 percent
Landform: Concave slopes on plateaus

Beamton and similar soils
Composition: About 6 percent
Landform: Concave slopes on plateaus

Soils similar to Diaflats that are a sandy loam throughout and similar soils
Composition: About 6 percent
Landform: Planar and concave slopes on dissected plateaus

59—Dranyon loam, 3 to 20 percent slopes

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 7,800 to 8,600 feet (2,377 to 2,621 meters)
Mean annual precipitation: 20 to 22 inches (508 to 559 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Dranyon and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Dranyon soils

Landform: Mountainsides
Parent material: Colluvium derived from basalt and sandstone
Slope: 3 to 20 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 7.9 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Aspen Woodland
Potential native vegetation:
Common trees: quaking aspen
Other plants: elk sedge, Letterman's needlegrass, blue wildrye, heartleaf arnica, slender wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 2 inches; slightly decomposed plant material
2 to 19 inches; loam
19 to 34 inches; gravelly sandy clay loam
34 to 60 inches; gravelly sandy clay loam

Minor Components

Foidel and similar soils
Composition: About 10 percent

60—Dumps, mine

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 8,400 feet (1,829 to 2,560 meters)
Mean annual precipitation: 11 to 18 inches (279 to 457 millimeters)
Mean annual air temperature: 40 to 45 degrees F. (4.4 to 7.2 degrees C.)
Freeze-free period: 65 to 95 days

Map Unit Composition

Dumps, mine: 100 percent
Minor components:

Component Descriptions

Dumps, mine

Slope: 3 to 65 percent
Available water capacity: About 0.0 inches (very low)
Salinity maximum: About 0 mmhos/cm (nonsaline)
Land capability subclass (nonirrigated): 8

61—Ecklund-Tipperary complex, 1 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,400 to 6,000 feet (1,646 to 1,829 meters)
Mean annual precipitation: 7 to 10 inches (178 to 254 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Freeze-free period: 95 to 105 days

Map Unit Composition

Ecklund and similar soils: 50 percent
Tipperary and similar soils: 40 percent
Minor components: 10 percent

Component Descriptions

Ecklund soils

Landform: Plateaus
Parent material: Residuum and eolian deposits derived from sandstone
Slope: 1 to 12 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 2.7 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 2 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 1 (slightly sodic)
Ecological site: Sandy Cold Desert
Potential native vegetation: needleandthread, Indian ricegrass, bottlebrush squirreltail, shadscale saltbush, Nevada bluegrass, Wyoming big sagebrush, plains pricklypear, spiny hopsage, streambank wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; loamy fine sand
3 to 24 inches; loamy fine sand
24 to 36 inches; gravelly fine sand
36 to 40 inches; unweathered bedrock

Tipperary soils

Landform: Plateaus
Parent material: Eolian deposits derived from mixed sources
Slope: 1 to 12 percent
Drainage class: Excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Available water capacity: About 4.8 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very low
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandy Cold Desert
Potential native vegetation: needleandthread, spiny hopsage, Indian ricegrass, shadscale saltbush, Nevada bluegrass, Wyoming big sagebrush, bottlebrush squirreltail, plains pricklypear
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; loamy fine sand
3 to 60 inches; loamy fine sand

Minor Components

Crustown and similar soils
Composition: About 10 percent
Landform: Narrow, steep convex slopes on plateaus

62—Eghelm loamy fine sand, 0 to 3 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,500 to 6,400 feet (1,676 to 1,951 meters)
Mean annual precipitation: 7 to 11 inches (178 to 279 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Freeze-free period: 90 to 105 days

Map Unit Composition

Eghelm and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Eghelm soils

Landform: Alluvial fans, terraces
Parent material: Alluvium derived from mixed sources
Slope: 0 to 3 percent

Drainage class: Somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 6.4 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Flooding hazard: Rare
Runoff class: Very low
Calcium carbonate maximum: About 3 percent
Gypsum maximum: None
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Saltdesert Overflow
Potential native vegetation: alkali sacaton, basin wildrye, big sagebrush, fourwing saltbush, Indian ricegrass, galleta, greasewood
Land capability subclass (irrigated): 4c
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 3 inches; loamy fine sand
3 to 52 inches; stratified loamy fine sand to loam
52 to 60 inches; stratified loam to silt loam

Minor Components

Youngston and similar soils
Composition: About 5 percent
Landform: Terraces
Drainage class: Well drained

Natrargids and similar soils
Composition: About 5 percent
Landform: Terraces

63—Eghelm loamy sand, moist, 0 to 3 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,700 to 6,200 feet (1,737 to 1,890 meters)
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Freeze-free period: 90 to 105 days

Map Unit Composition

Eghelm and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Eghelm soils

Landform: Flood plains
Parent material: Alluvium derived from mixed sources
Slope: 0 to 3 percent
Drainage class: Well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 5.7 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Flooding hazard: Rare
Seasonal high water table depth: About 60 to 72 inches
Runoff class: Very low
Calcium carbonate maximum: About 3 percent
Gypsum maximum: None
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 3 (slightly sodic)
Ecological site: Foothill Swale
Potential native vegetation: basin wildrye, big sagebrush, streambank wheatgrass, Indian ricegrass, fourwing saltbush, western wheatgrass
Land capability subclass (irrigated): 4c
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 6 inches; loamy sand
6 to 60 inches; stratified loamy sand to loam

Minor Components

Youngston and similar soils
Composition: About 5 percent

Baroid and similar soils
Composition: About 5 percent

64—Emlin loam, 1 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 47
Elevation: 6,600 to 8,100 feet (2,012 to 2,469 meters)
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Emlin and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Emlin soils

Landform: Pediments
Parent material: Alluvium derived from limestone and sandstone and in loess
Slope: 1 to 12 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 9.4 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 40 percent
Gypsum maximum: None
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 1 (slightly sodic)
Ecological site: Deep Loam
Potential native vegetation: needleandthread, western wheatgrass, mountain big sagebrush, muttongrass, prairie Junegrass, Nevada bluegrass, mountain snowberry, yellow rabbitbrush, basin wildrye
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 11 inches; loam
11 to 19 inches; clay loam
19 to 60 inches; silty clay loam

Minor Components

Stunner and similar soils
Composition: About 5 percent
Landform: Breaks, ridges
Position on landform: Shoulder

Brownsto and similar soils
Composition: About 5 percent
Landform: Breaks

Soils with 16 inch thick surface layers and similar soils
Composition: About 5 percent
Landform: Drainageways

65—Emlin-Tymosling complex, 1 to 15 percent slopes, very bouldery

Map Unit Setting

Major Land Resource Area: 47
Elevation: 7,200 to 8,200 feet (2,195 to 2,499 meters)
Mean annual precipitation: 14 to 16 inches (356 to 406 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Emlin and similar soils: 65 percent
Tymosling and similar soils: 20 percent
Minor components: 15 percent

Component Descriptions

Emlin soils

Landform: Concave and planar slopes on rolling plateaus
Parent material: Loess
Slope: 1 to 10 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 9.9 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 40 percent
Gypsum maximum: None
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 1 (slightly sodic)
Ecological site: Deep Loam
Potential native vegetation: needleandthread, western wheatgrass, mountain big sagebrush, muttongrass, prairie Junegrass, Nevada bluegrass, mountain snowberry, yellow rabbitbrush, basin wildrye
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 7 inches; loam
7 to 30 inches; clay loam
30 to 60 inches; clay loam

Tymosling soils

Landform: Knolls
Parent material: Colluvium and residuum derived from conglomerate, sandstone, and shale
Slope: 5 to 15 percent
Surface fragments: About 2 percent boulders
Depth to restrictive feature: 25 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 5.4 inches (low)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Dry Exposure
Potential native vegetation: bluebunch wheatgrass, Indian ricegrass, needleandthread, prairie Junegrass, winterfat
Land capability subclass (nonirrigated): 6s

Typical Profile:
0 to 1 inch; very gravelly clay loam
1 inch to 5 inches; gravelly clay loam
5 to 14 inches; clay
14 to 35 inches; clay
35 to 39 inches; weathered bedrock

Minor Components

Morapos and similar soils
Composition: About 5 percent
Landform: Short, moderately steep side slopes on plateaus

Weed and similar soils
Composition: About 5 percent
Landform: Narrow drainageways

Duffymont and similar soils
Composition: About 5 percent
Landform: Knolls

66—Evanot loam, 1 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,200 to 7,200 feet (1,890 to 2,195 meters)
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Evanot and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Evanot soils

Landform: Benches, hillslopes
Parent material: Loess
Slope: 1 to 12 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 9.8 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Deep Loam
Potential native vegetation: Wyoming big sagebrush, needleandthread, western wheatgrass, mountain snowberry, muttongrass, prairie Junegrass, basin wildrye
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 8 inches; loam
8 to 20 inches; clay loam
20 to 33 inches; clay loam
33 to 60 inches; loam

Minor Components

Forelle and similar soils
Composition: About 10 percent

67—Evanot loam, 12 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,200 to 7,200 feet (1,890 to 2,195 meters)
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)

Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Evanot and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Evanot soils

Landform: Hillslopes
Parent material: Loess
Slope: 12 to 25 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 9.8 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Deep Loam
Potential native vegetation: Wyoming big sagebrush, needleandthread, western wheatgrass, mountain snowberry, muttongrass, prairie Junegrass, basin wildrye
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 8 inches; loam
8 to 20 inches; clay loam
20 to 33 inches; clay loam
33 to 60 inches; loam

Minor Components

Forelle and similar soils
Composition: About 8 percent

Yamo and similar soils
Composition: About 7 percent

68—Evanot-Yamo complex, 3 to 20 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,500 to 7,000 feet (1,981 to 2,134 meters)
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Evanot and similar soils: 50 percent
Yamo and similar soils: 25 percent
Minor components: 25 percent

Component Descriptions

Evanot soils

Landform: Hills
Position on landform: Backslope
Parent material: Loess
Slope: 3 to 20 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 9.7 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Deep Loam
Potential native vegetation: Wyoming big sagebrush, needleandthread, western wheatgrass, mountain snowberry, muttongrass, prairie Junegrass, basin wildrye
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; loam
3 to 22 inches; clay loam
22 to 60 inches; loam

Yamo soils

Landform: Hills
Position on landform: Summit
Parent material: Loess
Slope: 3 to 20 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 9.2 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 1 (slightly sodic)

Ecological site: Clayey Foothills
Potential native vegetation: western wheatgrass, Wyoming big sagebrush, bluebunch wheatgrass, yellow rabbitbrush
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; loam
3 to 14 inches; loam
14 to 60 inches; loam

Minor Components

Weed and similar soils
Composition: About 13 percent
Landform: Swales

Areas with very stony surfaces and similar soils
Composition: About 12 percent
Landform: Hills
Position on landform: Summit

69—Fenster-Thenipel complex, 3 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,100 to 7,200 feet (1,859 to 2,194 meters)
Mean annual precipitation: 9 to 11 inches (228 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days
Note: The Fenster soils is in areas where the vegetation is dominated by Gardner's saltbush. The Thenipel soil is in areas where the vegetation is dominated by Wyoming big sagebrush, which accumulates snow, creating a moister site.

Map Unit Composition

Fenster and similar soils: 45 percent
Thenipel and similar soils: 30 percent
Minor components: 25 percent

Component Descriptions

Fenster soils

Landform: Hills, fans
Position on landform: Footslope, toeslope
Parent material: Alluvium and loess derived from siltstone
Slope: 3 to 12 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 9.5 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 15 percent
Gypsum maximum: About 1 percent
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 3 (slightly sodic)
Ecological site: Alkali Upland
Potential native vegetation: Gardner's saltbush, Indian ricegrass, streambank wheatgrass, western wheatgrass
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 2 inches; silt loam
2 to 11 inches; silty clay loam
11 to 60 inches; silty clay loam

Thenipel soils

Landform: Fans, hills
Position on landform: Footslope, toeslope
Parent material: Alluvium and loess derived from siltstone
Slope: 3 to 12 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 10.6 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 15 percent
Gypsum maximum: About 1 percent
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 3 (slightly sodic)
Ecological site: Rolling Loam
Potential native vegetation: western wheatgrass, Wyoming big sagebrush, needleandthread, Indian ricegrass, Nevada bluegrass, bottlebrush squirreltail, prairie Junegrass
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 2 inches; silt loam
2 to 25 inches; silty clay loam
25 to 60 inches; silty clay loam

Minor Components

Piezon and similar soils
Composition: About 7 percent

Vermillion and similar soils
Composition: About 6 percent

Sandwash and similar soils
Composition: About 6 percent

Hateron and similar soils
Composition: About 6 percent

70—Fluvaquents and Haplaquolls soils, frequently flooded

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,900 to 8,000 feet (1,798 to 2,438 meters)
Mean annual precipitation: 11 to 18 inches (279 to 457 millimeters)
Mean annual air temperature: 40 to 45 degrees F. (4.4 to 7.2 degrees C.)
Freeze-free period: 65 to 85 days

Map Unit Composition

Fluvaquents and similar soils: 50 percent
Haplaquolls and similar soils: 45 percent
Minor components: 5 percent

Component Descriptions

Fluvaquents soils

Landform: Depressions on stream terraces, flood plains
Parent material: Alluvium derived from mixed sources
Slope: 0 to 1 percent
Drainage class: Very poorly drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 7.1 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Flooding hazard: Frequent
Seasonal high water table depth: About 0 to 0 inches
Runoff class: Very low
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Potential native vegetation: cattail, rush, sedge, willow, common reed, reed canarygrass
Land capability subclass (nonirrigated): 6w

Typical Profile:
0 to 4 inches; sandy loam
4 to 60 inches; stratified sand to clay

Figure 12.—Map unit 70, Fluvaquents and Haplaquolls soils, frequently flooded, provides valuable wetland wildlife habitat.

Haplaquolls soils

Landform: Oxbows on flood plains, depressions on stream terraces
Parent material: Alluvium derived from mixed sources
Slope: 0 to 1 percent
Drainage class: Very poorly drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 6.6 inches (moderate)
Shrink-swell potential: About 0.5 percent (low)
Flooding hazard: Frequent
Seasonal high water table depth: About 0 to 0 inches
Runoff class: Negligible
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Potential native vegetation: cattail, rush, sedge, willow
Land capability subclass (nonirrigated): 6w

Typical Profile:
0 to 6 inches; clay loam
6 to 14 inches; clay loam
14 to 21 inches; fine sandy loam
21 to 34 inches; sandy clay loam
34 to 44 inches; sand
44 to 60 inches; extremely gravelly sand

Minor Components

Soils with seasonal high water tables deeper than 1 foot and similar soils
Composition: About 3 percent

Soils that are ponded and similar soils
Composition: About 2 percent

71—Flygare loam, dry, 25 to 65 percent slopes

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 7,000 to 8,400 feet (2,134 to 2,560 meters)
Mean annual precipitation: 18 to 20 inches (457 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Flygare and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Flygare soils

Landform: Mountainsides
Parent material: Colluvium derived from sandstone and shale
Slope: 25 to 65 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 5.8 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Brushy Loam
Potential native vegetation: Gambel's oak, Saskatoon serviceberry, elk sedge, mountain brome, Letterman's needlegrass, common chokecherry, mountain snowberry, nodding brome, slender wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 1 inch; slightly decomposed plant material
1 inch to 22 inches; loam
22 to 29 inches; very cobbly loam
29 to 35 inches; very cobbly clay loam
35 to 60 inches; extremely cobbly clay loam

Minor Components

Foidel and similar soils
Composition: About 8 percent

Skyway and similar soils
Composition: About 7 percent

72—Foidel loam, cool, 3 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 7,000 to 8,400 feet (2,134 to 2,560 meters)
Mean annual precipitation: 18 to 20 inches (457 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Foidel and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Foidel soils

Landform: Mountainsides, plateaus
Parent material: Loess and residuum derived from fine grained sandstone and shale
Slope: 3 to 25 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 10.9 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Medium
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Brushy Loam
Potential native vegetation: Gambel's oak, Saskatoon serviceberry, mountain brome, Letterman's needlegrass, common chokecherry, elk sedge, mountain snowberry, slender wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 2 inches; slightly decomposed plant material
2 to 28 inches; loam
28 to 39 inches; clay loam
39 to 60 inches; clay loam

Minor Components

Winevada and similar soils
Composition: About 3 percent

Routt and similar soils
Composition: About 3 percent

Coarse textured soils and similar soils
Composition: About 3 percent

Cochetopa and similar soils
Composition: About 3 percent

Clayburn and similar soils
Composition: About 3 percent

73—Foidel loam, 25 to 65 percent slopes

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 7,000 to 8,400 feet (2,134 to 2,560 meters)
Mean annual precipitation: 18 to 20 inches (457 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Foidel and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Foidel soils

Landform: Mountainsides
Parent material: Loess and colluvium derived from fine grained sandstone and shale
Slope: 25 to 65 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 10.9 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: High
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Brushy Loam
Potential native vegetation: Gambel's oak, Saskatoon serviceberry, mountain brome, Letterman's needlegrass, common chokecherry, elk sedge, mountain snowberry, slender wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 2 inches; slightly decomposed plant material
2 to 28 inches; loam
28 to 39 inches; clay loam
39 to 60 inches; clay loam

Minor Components

Skyway and similar soils
Composition: About 4 percent

Routt and similar soils
Composition: About 4 percent

Clayburn and similar soils
Composition: About 4 percent

Lamphier and similar soils
Composition: About 3 percent

74—Foidel, moist-Flygare-Skyway, moist complex, 3 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 7,600 to 8,400 feet (2,316 to 2,560 meters)
Mean annual precipitation: 20 to 22 inches (508 to 559 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Foidel and similar soils: 35 percent
Flygare and similar soils: 30 percent
Skyway and similar soils: 20 percent
Minor components: 15 percent

Component Descriptions

Foidel soils

Landform: Mountain plateaus
Parent material: Alluvium and residuum derived from sandstone

Slope: 3 to 25 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 11.0 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Medium
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Aspen Woodland
Potential native vegetation:
Common trees: quaking aspen
Other plants: common chokecherry, elk sedge, mountain brome, Letterman's needlegrass, Saskatoon serviceberry, mountain snowberry, slender wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 2 inches; slightly decomposed plant material
2 to 23 inches; loam
23 to 38 inches; loam
38 to 60 inches; clay loam

Flygare soils

Landform: Mountain plateaus
Parent material: Colluvium and residuum derived from sandstone
Slope: 3 to 25 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 5.8 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Aspen Woodland
Potential native vegetation:
Common trees: quaking aspen
Other plants: Colorado wildrye, mountain brome, Letterman's needlegrass, Saskatoon serviceberry, common chokecherry, elk sedge, mountain snowberry, nodding brome, quaking aspen
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 1 inch; slightly decomposed plant material
1 inch to 22 inches; loam
22 to 29 inches; very cobbly loam
29 to 35 inches; very cobbly clay loam
35 to 60 inches; extremely cobbly clay loam

Skyway soils

Landform: Mountain plateaus
Parent material: Residuum derived from sandstone
Slope: 3 to 25 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 4.0 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 1 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Aspen Woodland
Potential native vegetation:
Common trees: quaking aspen
Other plants: elk sedge, mountain brome, nodding brome, Gambel's oak, Saskatoon serviceberry, mountain snowberry
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 20 inches; fine sandy loam
20 to 31 inches; gravelly sandy loam
31 to 35 inches; unweathered bedrock

Minor Components

Routt and similar soils
Composition: About 8 percent

Lamphier and similar soils
Composition: About 7 percent

75—Fonce sandy loam, 1 to 8 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 6,600 feet (1,829 to 2,012 meters)

Mean annual precipitation: 10 to 12 inches (254 to 305 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Fonce and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Fonce soils

Landform: Plateaus
Parent material: Eolian deposits over relict fluvial deposits derived from mixed sources
Slope: 1 to 8 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 3.9 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 40 percent
Gypsum maximum: None
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Loamy 7-10" PPT
Potential native vegetation: Wyoming big sagebrush, Indian ricegrass, needleandthread, streambank wheatgrass, streambank wheatgrass, Sandberg bluegrass, bluebunch wheatgrass, prairie Junegrass, western wheatgrass
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 3 inches; sandy loam
3 to 15 inches; sandy clay loam
15 to 33 inches; very gravelly coarse sandy loam
33 to 60 inches; gravelly sand

Minor Components

Soils with sandy loam upper subsoils and similar soils
Composition: About 5 percent
Soils with less than 15 percent calcium carbonate and similar soils
Composition: About 3 percent

Soils with very gravelly upper subsoils and similar soils
Composition: About 2 percent

76—Fonce gravelly sandy loam, 3 to 12 percent slopes, very stony

Map Unit Setting

Major Land Resource Area: 34
Elevation: 7,000 to 7,800 feet (2,134 to 2,377 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Fonce and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Fonce soils

Landform: Fan terraces
Parent material: Colluvium and alluvium derived from sandstone
Slope: 3 to 12 percent
Surface fragments: About 2 percent stones
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 4.5 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 40 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Shallow Slopes
Potential native vegetation: streambank wheatgrass, streambank wheatgrass, black sagebrush, bluebunch wheatgrass, bottlebrush squirreltail, needleandthread
Land capability subclass (nonirrigated): 6s

Typical Profile:
0 to 2 inches; gravelly sandy loam
2 to 16 inches; gravelly sandy clay loam
16 to 30 inches; very cobbly sandy loam, very gravelly sandy loam
30 to 60 inches; very gravelly sandy loam

Minor Components

Very stony soils and similar soils
Composition: About 5 percent

Landform: Gently and moderately sloping convex slopes on fan terraces

Moderately deep soils over sandstone bedrock and similar soils
Composition: About 5 percent
Landform: Long narrow moderately steep breaks
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)

77—Forelle loam, 3 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,200 to 7,200 feet (1,890 to 2,195 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Forelle and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Forelle soils

Landform: Benches
Parent material: Loess and in alluvium derived from shale and sandstone
Slope: 3 to 12 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 9.8 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Rolling Loam
Potential native vegetation: Wyoming big sagebrush, western wheatgrass, Sandberg bluegrass, needleandthread, prairie Junegrass, Indian ricegrass, bluebunch wheatgrass
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 5 inches; loam
5 to 23 inches; clay loam
23 to 51 inches; loam
51 to 60 inches; sandy loam

Minor Components

Yamo and similar soils
Composition: About 8 percent

Pinelli and similar soils
Composition: About 7 percent

78—Forelle loam, 12 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,200 to 7,000 feet (1,890 to 2,134 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Forelle and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Forelle soils

Landform: Hillslopes
Parent material: Loess
Slope: 12 to 25 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 9.8 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Rolling Loam
Potential native vegetation: Wyoming big sagebrush, western wheatgrass, Sandberg bluegrass, needleandthread, prairie Junegrass, Indian ricegrass, bluebunch wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 5 inches; loam
5 to 23 inches; clay loam

23 to 51 inches; loam
51 to 60 inches; sandy loam

Minor Components

Yamo and similar soils
Composition: About 8 percent

Pinelli and similar soils
Composition: About 7 percent

79—Forelle-Evanot complex, 1 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,200 to 7,200 feet (1,890 to 2,195 meters)
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Forelle and similar soils: 50 percent
Evanot and similar soils: 40 percent
Minor components: 10 percent

Component Descriptions

Forelle soils

Landform: Hillslopes, benches
Parent material: Loess
Slope: 1 to 12 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 9.8 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Rolling Loam
Potential native vegetation: Wyoming big sagebrush, western wheatgrass, Sandberg bluegrass, needleandthread, prairie Junegrass, Indian ricegrass, bluebunch wheatgrass
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 5 inches; loam
5 to 23 inches; clay loam
23 to 51 inches; loam
51 to 60 inches; sandy loam

Evanot soils

Landform: Hillslopes, benches
Parent material: Loess
Slope: 1 to 12 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 9.8 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Deep Loam
Potential native vegetation: Wyoming big sagebrush, needleandthread, western wheatgrass, mountain snowberry, muttongrass, prairie Junegrass, basin wildrye
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 8 inches; loam
8 to 20 inches; clay loam
20 to 33 inches; clay loam
33 to 60 inches; loam

Minor Components

Yamo and similar soils
Composition: About 5 percent

Rock River and similar soils
Composition: About 5 percent

80—Forelle-Evanot complex, 12 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 6,200 to 7,200 feet (1,890 to 2,195 meters)

Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Forelle and similar soils: 50 percent
Evanot and similar soils: 40 percent
Minor components: 10 percent

Component Descriptions

Forelle soils

Landform: Hillslopes
Parent material: Loess
Slope: 12 to 25 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 9.8 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Rolling Loam
Potential native vegetation: Wyoming big sagebrush, western wheatgrass, Sandberg bluegrass, needleandthread, prairie Junegrass, Indian ricegrass, bluebunch wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 5 inches; loam
5 to 23 inches; clay loam
23 to 51 inches; loam
51 to 60 inches; sandy loam

Evanot soils

Landform: Hillslopes
Parent material: Loess
Slope: 12 to 25 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 9.8 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Deep Loam
Potential native vegetation: Wyoming big sagebrush, needleandthread, western wheatgrass, mountain snowberry, muttongrass, prairie Junegrass, basin wildrye
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 8 inches; loam
8 to 20 inches; clay loam
20 to 33 inches; clay loam
33 to 60 inches; loam

Minor Components

Yamo and similar soils
Composition: About 10 percent

81—Forelle-Obadia complex, 1 to 8 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,400 to 6,800 feet (1,951 to 2,073 meters)
Mean annual precipitation: 11 to 15 inches (279 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Forelle and similar soils: 40 percent
Obadia and similar soils: 35 percent
Minor components: 25 percent

Component Descriptions

Forelle soils

Landform: Hills
Position on landform: Footslope, toeslope
Parent material: Alluvium derived from shale and sandstone
Slope: 1 to 8 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 10.5 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None

Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Rolling Loam
Potential native vegetation: Wyoming big sagebrush, western wheatgrass, Sandberg bluegrass, needleandthread, prairie Junegrass, Indian ricegrass, bluebunch wheatgrass
Land capability subclass (nonirrigated): 4c

Typical Profile:
0 to 6 inches; loam
6 to 30 inches; clay loam
30 to 60 inches; sandy clay loam

Obadia soils

Landform: Hills
Position on landform: Toeslope
Parent material: Alluvium derived from sandstone and shale
Slope: 1 to 8 percent
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 8.3 inches (moderate)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 10 percent
Gypsum maximum: About 3 percent
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 20 (moderately sodic)
Ecological site: Claypan
Potential native vegetation: alkali sagebrush, western wheatgrass, bluebunch wheatgrass, prairie Junegrass
Land capability subclass (nonirrigated): 4s

Typical Profile:
0 to 1 inch; sandy loam
1 inch to 13 inches; clay
13 to 42 inches; clay loam
42 to 60 inches; sandy clay loam

Minor Components

Rock River and similar soils
Composition: About 7 percent
Landform: Hills
Position on landform: Footslope

Pinelli and similar soils
Composition: About 6 percent
Landform: Hills
Position on landform: Footslope

Milren and similar soils
Composition: About 6 percent
Landform: Hills
Position on landform: Toeslope

Tisworth and similar soils
Composition: About 6 percent
Landform: Hills
Position on landform: Toeslope

82—Forelle-Pinelli-Maysprings complex, 5 to 20 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,200 to 7,000 feet (1,890 to 2,134 meters)
Mean annual precipitation: 11 to 15 inches (279 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Forelle and similar soils: 30 percent
Pinelli and similar soils: 30 percent
Maysprings and similar soils: 15 percent
Minor components: 25 percent

Component Descriptions

Forelle soils

Landform: Hills
Parent material: Loess
Slope: 5 to 20 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 10.3 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Rolling Loam

Potential native vegetation: Wyoming big sagebrush, western wheatgrass, Sandberg bluegrass, needleandthread, prairie Junegrass, Indian ricegrass, bluebunch wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 5 inches; loam
5 to 19 inches; clay loam
19 to 60 inches; loam

Pinelli soils

Landform: Hills
Parent material: Loess and residuum derived from shale
Slope: 5 to 20 percent
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 9.3 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Very high
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Clayey Foothills
Potential native vegetation: western wheatgrass, Wyoming big sagebrush, bottlebrush squirreltail, prairie Junegrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; loam
3 to 19 inches; clay
19 to 60 inches; clay loam

Maysprings soils

Landform: Hills
Position on landform: Backslope, summit
Parent material: Residuum derived from sandstone
Slope: 5 to 20 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 4.4 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 2 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandyland
Potential native vegetation: antelope bitterbrush, Wyoming big sagebrush, needleandthread, Indian ricegrass, bluebunch wheatgrass, prairie Junegrass, western wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 2 inches; loamy coarse sand
2 to 14 inches; sandy clay loam
14 to 20 inches; coarse sandy loam
20 to 60 inches; coarse sand

Minor Components

Taffom and similar soils
Composition: About 7 percent
Landform: Hills
Position on landform: Backslope, footslope

Gretivid and similar soils
Composition: About 6 percent
Landform: Hills
Position on landform: Summit

Abor and similar soils
Composition: About 6 percent
Landform: Hills
Position on landform: Summit, footslope

Styers and similar soils
Composition: About 6 percent
Landform: Hills
Position on landform: Summit, footslope

83—Forsey-Libeg complex, 3 to 25 percent slopes, very stony

Map Unit Setting

Major Land Resource Area: 47
Elevation: 7,000 to 8,500 feet (2,134 to 2,591 meters)
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Forsey and similar soils: 50 percent

Libeg and similar soils: 30 percent
Minor components: 20 percent

Component Descriptions

Forsey soils

Landform: Convex and planar areas on plateaus, mountainsides
Parent material: Relict fluvial deposits derived from sandstone and quartzite
Slope: 3 to 25 percent
Surface fragments: About 2 percent stones
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 3.8 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Dry Exposure
Potential native vegetation: black sagebrush, bluebunch wheatgrass, needleandthread, Indian ricegrass, prairie Junegrass, bottlebrush squirreltail, western wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 8 inches; cobbly sandy loam
8 to 24 inches; very cobbly sandy clay loam
24 to 60 inches; very cobbly sandy loam

Libeg soils

Landform: Concave areas on mountainsides, plateaus
Parent material: Relict fluvial deposits
Slope: 3 to 15 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 5.2 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Dry Mountain Loam
Potential native vegetation: bluebunch wheatgrass, streambank wheatgrass, Letterman's needlegrass, Wyoming big sagebrush, needleandthread
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 5 inches; loam
5 to 12 inches; gravelly loam
12 to 35 inches; very gravelly sandy clay loam
35 to 60 inches; extremely cobbly sandy loam

Minor Components

Thornburgh and similar soils
Composition: About 10 percent
Landform: Concave and planar slopes mountainsides

Losee and similar soils
Composition: About 10 percent
Landform: Steeper convex slopes on mountainsides

84—Gebson, moist-Youga complex, 5 to 25 percent slopes, extremely stony

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 7,000 to 8,600 feet (2,134 to 2,621 meters)
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Gebson and similar soils: 55 percent
Youga and similar soils: 35 percent
Minor components: 10 percent

Component Descriptions

Gebson soils

Landform: Mountainsides
Parent material: Colluvium derived from basalt and sandstone
Slope: 5 to 25 percent, southern to western aspects
Surface fragments: About 3 percent boulders, about 10 percent (shape or size unspecified)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 7.8 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)

Runoff class: Medium
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Stony Loam
Potential native vegetation: bluebunch wheatgrass, Saskatoon serviceberry, mountain big sagebrush, Letterman's needlegrass, antelope bitterbrush, mountain snowberry, muttongrass, needleandthread
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 2 inches; very bouldery sandy loam
2 to 7 inches; very bouldery sandy clay loam
7 to 13 inches; gravelly sandy clay loam
13 to 24 inches; sandy clay loam
24 to 60 inches; gravelly sandy clay loam

Youga soils

Landform: Mountainsides
Parent material: Alluvium and residuum derived from sandstone
Slope: 5 to 15 percent, eastern to northern aspects
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 8.7 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam
Potential native vegetation: mountain big sagebrush, western wheatgrass, needleandthread, Letterman's needlegrass, mountain brome, mountain snowberry, slender wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 10 inches; fine sandy loam
10 to 16 inches; sandy clay loam
16 to 50 inches; sandy clay loam
50 to 60 inches; fine sandy loam

Minor Components

Clayburn and similar soils
Composition: About 10 percent
Landform: Concave areas on mountainsides

85—Giarch fine sandy loam, 0 to 3 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 6,400 feet (1,829 to 1,951 meters)
Mean annual precipitation: 11 to 15 inches (279 to 381 millimeters)
Mean annual air temperature: 43 to 45 degrees F. (6.1 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Giarch and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Giarch soils

Landform: Terraces
Parent material: Alluvium derived from mixed sources
Slope: 0 to 3 percent
Drainage class: Moderately well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 7.6 inches (moderate)
Shrink-swell potential: About 4.5 percent (moderate)
Flooding hazard: Rare
Seasonal high water table depth: About 48 to 72 inches
Runoff class: Very high
Calcium carbonate maximum: About 10 percent
Gypsum maximum: About 3 percent
Salinity maximum: About 32 mmhos/cm (strongly saline)
Sodium adsorption ratio maximum: About 200 (strongly sodic)
Ecological site: Alkaline Slopes
Potential native vegetation: Wyoming big sagebrush, greasewood, inland saltgrass, streambank wheatgrass, streambank wheatgrass, western wheatgrass, alkali bluegrass, bottlebrush squirreltail
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 2 inches; fine sandy loam
2 to 18 inches; clay loam
18 to 58 inches; sandy clay loam
58 to 60 inches; sand

Minor Components

Tisworth and similar soils
Composition: About 4 percent

Cowestglen and similar soils
Composition: About 3 percent

Battlement and similar soils
Composition: About 3 percent

86—Gracot-Maybell complex, 5 to 30 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 6,800 feet (1,829 to 2,073 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Gracot and similar soils: 50 percent
Maybell and similar soils: 30 percent
Minor components: 20 percent

Component Descriptions

Gracot soils

Landform: Breaks, hills
Parent material: Fluvial deposits over residuum derived from fine grained sandstone
Slope: 5 to 30 percent
Drainage class: Excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Available water capacity: About 3.6 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very low
Calcium carbonate maximum: About 20 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Loamy Breaks
Potential native vegetation: western wheatgrass, black sagebrush, bluebunch wheatgrass, Indian ricegrass, antelope bitterbrush, needleandthread, prairie Junegrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 5 inches; very gravelly loamy sand
5 to 16 inches; extremely gravelly loamy sand
16 to 60 inches; fine sand

Maybell soils

Landform: Hills, breaks
Parent material: Eolian deposits derived from sandstone
Slope: 5 to 30 percent
Drainage class: Excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Available water capacity: About 4.9 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very low
Calcium carbonate maximum: About 2 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandhills
Potential native vegetation: antelope bitterbrush, silver sagebrush, Indian ricegrass, needleandthread, Wyoming big sagebrush, rabbitbrush, sand dropseed, western wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; sand
3 to 15 inches; sand
15 to 60 inches; sand

Minor Components

Moderately deep soils over sandstone and similar soils
Composition: About 15 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)

Grimm and similar soils
Composition: About 5 percent

87—Gretdivid-Taffom-Abor complex, 10 to 30 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,400 to 6,700 feet (1,951 to 2,042 meters)
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Gretdivid and similar soils: 35 percent
Taffom and similar soils: 25 percent
Abor and similar soils: 15 percent
Minor components: 25 percent

Component Descriptions

Gretdivid soils

Landform: Hills
Position on landform: Summit, shoulder
Parent material: Residuum derived from sandstone
Slope: 10 to 30 percent
Drainage class: Somewhat excessively drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 3.4 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandyland
Potential native vegetation: Wyoming big sagebrush, antelope bitterbrush, needleandthread, Indian ricegrass, western wheatgrass, bottlebrush squirreltail, prairie Junegrass, streambank wheatgrass, streambank wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; loamy coarse sand
3 to 7 inches; sandy clay loam
7 to 60 inches; coarse sand

Taffom soils

Landform: Hills
Position on landform: Footslope
Parent material: Colluvium and residuum derived from sandstone
Slope: 10 to 30 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 7.4 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Rolling Loam
Potential native vegetation: Wyoming big sagebrush, needleandthread, western wheatgrass, prairie Junegrass, Indian ricegrass, Nevada bluegrass, bluebunch wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 6 inches; sandy loam
6 to 43 inches; sandy clay loam
43 to 60 inches; sandy loam

Abor soils

Landform: Hills
Parent material: Residuum derived from shale
Slope: 10 to 30 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 4.5 inches (low)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 4 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Claypan
Potential native vegetation: alkali sagebrush, western wheatgrass, bluebunch wheatgrass, Sandberg bluegrass, bottlebrush squirreltail
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 6 inches; clay
6 to 31 inches; clay
31 to 35 inches; weathered bedrock

Minor Components

Maysprings and similar soils
Composition: About 5 percent
Landform: Hills
Position on landform: Footslope

Forelle and similar soils
Composition: About 5 percent
Landform: Swales

Berlake and similar soils
Composition: About 5 percent
Landform: Swales

Yamo and similar soils
Composition: About 5 percent
Landform: Hills
Position on landform: Summit

Maybell and similar soils
Composition: About 5 percent
Landform: Hills
Position on landform: Summit

88—Grieves loamy fine sand, 1 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,800 to 6,800 feet (1,768 to 2,073 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Grieves and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Grieves soils

Landform: Alluvial fans, hills
Position on landform: Footslope
Parent material: Alluvium derived from sandstone
Slope: 1 to 12 percent
Drainage class: Somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 7.6 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandy Foothills
Potential native vegetation: Wyoming big sagebrush, needleandthread, Indian ricegrass, antelope bitterbrush
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 2 inches; loamy fine sand
2 to 30 inches; fine sandy loam
30 to 60 inches; fine sandy loam

Minor Components

Ryan Park and similar soils
Composition: About 8 percent

Coyet and similar soils
Composition: About 7 percent

89—Grieves loamy fine sand, 12 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,800 to 6,800 feet (1,768 to 2,073 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Grieves and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Grieves soils

Landform: Hills
Position on landform: Footslope
Parent material: Alluvium and residuum derived from sandstone
Slope: 12 to 25 percent
Drainage class: Somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 7.6 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandy Foothills
Potential native vegetation: Wyoming big sagebrush, needleandthread, Indian ricegrass, antelope bitterbrush
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 2 inches; loamy fine sand
2 to 30 inches; fine sandy loam
30 to 60 inches; fine sandy loam

Minor Components

Ryan Park and similar soils
Composition: About 8 percent

Coyet and similar soils
Composition: About 7 percent

90—Grieves-Crestman complex, 10 to 40 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 7,200 feet (1,829 to 2,195 meters)
Mean annual precipitation: 11 to 12 inches (279 to 305 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Grieves and similar soils: 45 percent
Crestman and similar soils: 35 percent
Minor components: 20 percent

Component Descriptions

Grieves soils

Landform: Hills
Position on landform: Footslope
Parent material: Alluvium derived from sandstone
Slope: 10 to 30 percent
Drainage class: Somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 7.6 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandy Foothills
Potential native vegetation: antelope bitterbrush, bluebunch wheatgrass, Indian ricegrass, Wyoming big sagebrush, bottlebrush squirreltail, needleandthread
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 2 inches; loamy fine sand
2 to 30 inches; fine sandy loam
30 to 60 inches; fine sandy loam

Crestman soils

Landform: Hills
Position on landform: Summit, backslope
Parent material: Residuum derived from sandstone
Slope: 15 to 40 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)
Drainage class: Excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 1.0 inch (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandy Juniper
Potential native vegetation:
Common trees: twoneedle pinyon, Utah juniper
Other plants: Wyoming big sagebrush, streambank wheatgrass, antelope bitterbrush, needleleaf sedge, Indian ricegrass, Truckee rabbitbrush, bluebunch wheatgrass, bottlebrush squirreltail, needleandthread, prairie Junegrass, western wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 2 inches; loamy sand
2 to 14 inches; gravelly loamy sand
14 to 18 inches; weathered bedrock

Minor Components

Cushool and similar soils
Composition: About 5 percent

Moyerson and similar soils
Composition: About 5 percent

Rock outcrop
Composition: About 5 percent

Gracot and similar soils
Composition: About 5 percent

91—Grieves-Yamo-Crestman association, 3 to 45 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,200 to 7,000 feet (1,890 to 2,134 meters)
Mean annual precipitation: 11 to 12 inches (279 to 305 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Grieves and similar soils: 40 percent
Yamo and similar soils: 25 percent
Crestman and similar soils: 20 percent
Minor components: 15 percent

Component Descriptions

Grieves soils

Landform: Hills
Position on landform: Footslope
Parent material: Alluvium and residuum derived from sandstone
Slope: 5 to 25 percent
Drainage class: Somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 7.6 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandy Foothills
Potential native vegetation: Wyoming big sagebrush, needleandthread, Indian ricegrass, antelope bitterbrush
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 2 inches; loamy fine sand
2 to 60 inches; fine sandy loam

Yamo soils

Landform: Hills
Position on landform: Footslope, toeslope
Parent material: Alluvium derived from sandstone
Slope: 3 to 15 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 10.6 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 1 (slightly sodic)
Ecological site: Clayey Foothills
Potential native vegetation: western wheatgrass, Wyoming big sagebrush, bluebunch wheatgrass, yellow rabbitbrush
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 5 inches; clay loam
5 to 60 inches; sandy clay loam

Crestman soils

Landform: Hills
Position on landform: Summit, backslope
Parent material: Residuum derived from sandstone
Slope: 15 to 45 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)
Drainage class: Excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 1.0 inch (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandy Juniper
Potential native vegetation:
Common trees: twoneedle pinyon, Utah juniper
Other plants: Wyoming big sagebrush, streambank wheatgrass, antelope bitterbrush, needleleaf sedge, Indian ricegrass, Truckee rabbitbrush, bluebunch wheatgrass, bottlebrush squirreltail, needleandthread, prairie Junegrass, western wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 2 inches; loamy sand
2 to 14 inches; gravelly loamy sand
14 to 18 inches; weathered bedrock

Minor Components

Moyerson and similar soils
Composition: About 8 percent

Rock outcrop
Composition: About 7 percent

92—Grimm-Ustic Torriorthents, shallow complex, 15 to 45 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,200 to 7,500 feet (1,890 to 2,286 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Grimm and similar soils: 50 percent
Ustic Torriorthents and similar soils: 40 percent
Minor components: 10 percent

Component Descriptions

Grimm soils

Landform: Hills
Position on landform: Backslope, shoulder
Parent material: Relict alluvium derived from mixed sources
Slope: 15 to 45 percent
Drainage class: Excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Available water capacity: About 2.7 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 3 percent
Gypsum maximum: About 1 percent
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 1 (slightly sodic)
Ecological site: Gravelly 7-14" P.Z.
Potential native vegetation: bluebunch wheatgrass, black sagebrush, Indian ricegrass, needleandthread, prairie Junegrass, streambank wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 4 inches; extremely cobbly loamy sand
4 to 13 inches; very cobbly loamy sand
13 to 18 inches; sandy loam
18 to 60 inches; extremely cobbly sand

Ustic Torriorthents soils

Landform: Hills
Position on landform: Backslope
Parent material: Colluvium derived from relict fluvial deposits over residuum derived from sandstone and shale
Slope: 15 to 45 percent
Depth to restrictive feature: 7 to 20 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 1.9 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 7 inches; very cobbly sandy loam
7 to 18 inches; sandy loam
18 to 22 inches; weathered bedrock

Minor Components

Moderately deep soils and similar soils
Composition: About 10 percent
Landform: Hills
Position on landform: Footslope
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)

93—Gullied land

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,500 to 6,500 feet (1,676 to 1,981 meters)
Mean annual precipitation: 9 to 13 inches (229 to 330 millimeters)
Mean annual air temperature: 42 to 48 degrees F. (5.6 to 8.9 degrees C.)
Freeze-free period: 75 to 105 days

Map Unit Composition

Gullied land: 85 percent
Minor components: 15 percent

Component Descriptions

Gullied land

Description: Gullied lands consists of areas where a network of deep, wide, and steep-sided gullies have extensively dissected the landscape.
Landform: Stream terraces
Slope: 0 to 15 percent
Available water capacity: About 0.0 inches (very low)
Flooding hazard: Occasional
Runoff class: Very high
Salinity maximum: About 0 mmhos/cm (nonsaline)

Minor Components

Soils from adjacent units and similar soils
Composition: About 15 percent

94—Hapney fine sandy loam, moist, 0 to 1 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 6,300 feet (1,829 to 1,920 meters)
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Hapney and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Hapney soils

Landform: Stream terraces
Parent material: Alluvium derived from mixed sources
Slope: 0 to 1 percent
Drainage class: Moderately well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 8.8 inches (moderate)
Shrink-swell potential: About 4.5 percent (moderate)
Seasonal high water table depth: About 48 to 72 inches
Runoff class: High
Calcium carbonate maximum: About 10 percent
Gypsum maximum: About 5 percent
Salinity maximum: About 16 mmhos/cm (moderately saline)
Sodium adsorption ratio maximum: About 30 (strongly sodic)
Ecological site: Salt Flats
Potential native vegetation: alkali sacaton, inland saltgrass, Wyoming big sagebrush, western wheatgrass, basin wildrye, bottlebrush squirreltail, greasewood
Land capability subclass (nonirrigated): 6s

Typical Profile:
0 to 2 inches; fine sandy loam
2 to 15 inches; clay
15 to 50 inches; clay loam
50 to 60 inches; sandy clay loam

Minor Components

Giarch and similar soils
Composition: About 5 percent

Soils with sand or very gravelly sand substrata and similar soils
Composition: About 5 percent

95—Haterton-Piezon complex, 3 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,100 to 7,200 feet (1,859 to 2,195 meters)
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days
Note: The Hateron soil occupies areas where the vegetation is dominated by Gardner's saltbush. The Piezon soil occupies circular to oblong areas where the vegetation is dominated by Wyoming big sagebrush, which accumulates more snow, creating a moister site.

Map Unit Composition

Haterton and similar soils: 60 percent
Piezon and similar soils: 30 percent
Minor components: 10 percent

Component Descriptions

Haterton soils

Landform: Plateaus, hillslopes

Parent material: Residuum derived from siltstone and fine grained sandstone
Slope: 3 to 12 percent
Depth to restrictive feature: 7 to 20 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 2.2 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 15 percent
Gypsum maximum: About 5 percent
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 10 (slightly sodic)
Ecological site: Alkali Upland
Potential native vegetation: Gardner's saltbush, Indian ricegrass, western wheatgrass, streambank wheatgrass
Land capability subclass (nonirrigated): 6s

Typical Profile:
0 to 2 inches; loam
2 to 16 inches; channery loam
16 to 20 inches; weathered bedrock

Piezon soils

Landform: Plateaus, hillslopes
Parent material: Residuum derived from siltstone and fine grained sandstone
Slope: 3 to 12 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 4.0 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 25 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Rolling Loam
Potential native vegetation: western wheatgrass, Wyoming big sagebrush, needleandthread, Indian ricegrass, Nevada bluegrass, bottlebrush squirreltail, prairie Junegrass
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 2 inches; loam
2 to 13 inches; loam
13 to 23 inches; channery loam
23 to 27 inches; weathered bedrock

Minor Components

Thenipel and similar soils
Composition: About 5 percent

Fenster and similar soils
Composition: About 5 percent

96—Heathcoat stony loam, 1 to 6 percent slopes, extremely stony

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 7,300 to 8,400 feet (2,225 to 2,560 meters)
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Heathcoat and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Heathcoat soils

Landform: Plateaus
Parent material: Residuum derived from sandstone mantled by basalt rock fragments
Slope: 1 to 6 percent
Surface fragments: About 7 percent stones
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 9.2 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 35 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam

Potential native vegetation: Letterman's needlegrass, mountain big sagebrush, slender wheatgrass, brome, mountain snowberry, muttongrass, nodding brome
Land capability subclass (nonirrigated): 6s

Typical Profile:
0 to 13 inches; stony loam
13 to 29 inches; clay loam
29 to 60 inches; sandy clay loam

Minor Components

Soils with dark surface layers more than 16 inches thick and similar soils
Composition: About 8 percent

Soils that do not have calcium carbonate in the top 35 inches and similar soils
Composition: About 7 percent

97—Heathcoat-Clayburn complex, 5 to 35 percent slopes, very stony

Map Unit Setting

Major Land Resource Area: 47
Elevation: 7,500 to 8,300 feet (2,286 to 2,530 meters)
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Heathcoat and similar soils: 60 percent
Clayburn and similar soils: 25 percent
Minor components: 15 percent

Component Descriptions

Heathcoat soils

Landform: Benches
Parent material: Colluvium and residuum derived from shale and sandstone
Slope: 5 to 20 percent
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 9.3 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Very high
Calcium carbonate maximum: About 35 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam
Potential native vegetation: Letterman's needlegrass, mountain big sagebrush, slender wheatgrass, brome, mountain snowberry, muttongrass, nodding brome
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 6 inches; loam
6 to 22 inches; clay loam
22 to 60 inches; clay loam

Clayburn soils

Landform: Mountainsides, drainageways
Position on landform: Backslope
Parent material: Colluvium and residuum derived from interbedded shale and sandstone
Slope: 5 to 35 percent
Surface fragments: About 3 percent stones
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 10.5 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Very high
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Brushy Loam
Potential native vegetation: Gambel's oak, Saskatoon serviceberry, mountain brome, Letterman's needlegrass, elk sedge, mountain snowberry, nodding brome, slender wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 15 inches; loam
15 to 44 inches; clay loam
44 to 60 inches; gravelly loam

Minor Components

Rock outcrop
Composition: About 5 percent
Landform: Breaks

Cochetopa and similar soils
Composition: About 5 percent

Landform: Drainageways, mountainsides
Position on landform: Backslope

Binco and similar soils
Composition: About 5 percent
Landform: Steep convex slopes on mountainsides

98—Herm-Fughes complex, 10 to 20 percent slopes, extremely bouldery

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,800 to 7,700 feet (2,073 to 2,347 meters)
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Herm and similar soils: 50 percent
Fughes and similar soils: 35 percent
Minor components: 15 percent

Component Descriptions

Herm soils

Landform: Hillslopes
Parent material: Colluvium derived from shale
Slope: 10 to 20 percent
Surface fragments: About 5 percent boulders, about 5 percent stones
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 8.4 inches (moderate)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 2 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Deep Clay Loam
Potential native vegetation: western wheatgrass, Letterman's needlegrass, mountain big sagebrush, mountain brome, mountain snowberry, muttongrass, prairie Junegrass
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 10 inches; bouldery clay loam
10 to 18 inches; stony clay
18 to 45 inches; clay
45 to 60 inches; clay

Fughes soils

Landform: Hillslopes
Parent material: Colluvium derived from shale
Slope: 10 to 20 percent
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 7.7 inches (moderate)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam
Potential native vegetation: Letterman's needlegrass, mountain big sagebrush, Saskatoon serviceberry, elk sedge, mountain brome, mountain snowberry, muttongrass, slender wheatgrass
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 19 inches; bouldery loam
19 to 46 inches; clay
46 to 60 inches; clay

Minor Components

Soils with surface layers 5 to 9 inches thick and similar soils
Composition: About 15 percent

99—Hesperus fine sandy loam, dry, 2 to 15 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,500 to 7,000 feet (1,981 to 2,134 meters)
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Freeze-free period: 65 to 85 days

Map Unit Composition

Hesperus and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Hesperus soils

Landform: Hills, plateaus
Position on landform: Footslope
Parent material: Loess and in alluvium derived from sandstone and shale
Slope: 2 to 15 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 11.0 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Medium
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam
Potential native vegetation: Letterman's needlegrass, mountain big sagebrush, slender wheatgrass, western wheatgrass, elk sedge, mountain brome, mountain snowberry, nodding brome
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 5 inches; fine sandy loam
5 to 20 inches; loam
20 to 52 inches; clay loam
52 to 60 inches; clay loam

Minor Components

Weed and similar soils
Composition: About 8 percent

Pagoda and similar soils
Composition: About 7 percent

100—Hesperus loam, 15 to 50 percent slopes

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 7,000 to 7,600 feet (2,134 to 2,316 meters)
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Freeze-free period: 65 to 85 days

Map Unit Composition

Hesperus and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Hesperus soils

Landform: Mountainsides
Parent material: Residuum derived from sandstone
Slope: 15 to 50 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 11.0 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Very high
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Brushy Loam
Potential native vegetation: Gambel's oak, Saskatoon serviceberry, elk sedge, mountain brome, Letterman's needlegrass, mountain snowberry, nodding brome, slender wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 12 inches; loam
12 to 45 inches; clay loam
45 to 60 inches; clay loam

Minor Components

Soils with a surface layer less than 16 inches thick and similar soils
Composition: About 5 percent

Soils with a stony surface and similar soils
Composition: About 5 percent

101—Hesperus loam, 3 to 25 percent slopes, very stony

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 6,600 to 7,600 feet (2,012 to 2,316 meters)
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)

Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Freeze-free period: 65 to 85 days

Map Unit Composition

Hesperus and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Hesperus soils

Landform: Plateaus, mountainsides
Parent material: Colluvium and residuum derived from sandstone mantled by basalt rock fragments
Slope: 3 to 25 percent
Surface fragments: About 9 percent (shape or size unspecified)
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 11.0 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: High
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Brushy Loam
Potential native vegetation: Gambel's oak, Saskatoon serviceberry, elk sedge, mountain brome, Letterman's needlegrass, mountain snowberry, nodding brome, slender wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 12 inches; loam
12 to 45 inches; clay loam
45 to 60 inches; clay loam

Minor Components

Pagoda and similar soils
Composition: About 5 percent

Morapos and similar soils
Composition: About 5 percent

102—Holter-Detra complex, 3 to 25 percent slopes, extremely stony

Map Unit Setting

Major Land Resource Area: 47
Elevation: 7,000 to 8,200 feet (2,134 to 2,499 meters)
Mean annual precipitation: 15 to 17 inches (381 to 432 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Holter and similar soils: 55 percent
Detra and similar soils: 30 percent
Minor components: 15 percent

Component Descriptions

Holter soils

Landform: Hills
Position on landform: Toeslope, footslope
Parent material: Alluvium and colluvium derived from sandstone and limestone
Slope: 10 to 25 percent
Surface fragments: About 13 percent stones
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 4.6 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 4 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam
Potential native vegetation: slender wheatgrass, Letterman's needlegrass, mountain big sagebrush, Saskatoon serviceberry, mountain brome, mountain snowberry, prairie Junegrass
Land capability subclass (nonirrigated): 6s

Typical Profile:
0 to 10 inches; very stony fine sandy loam

10 to 23 inches; extremely cobbly clay loam
23 to 60 inches; extremely cobbly loam

Detra soils

Landform: Valley floors
Parent material: Alluvium derived from limestone and sandstone
Slope: 3 to 10 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 8.2 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Deep Loam
Potential native vegetation: mountain big sagebrush, needleandthread, western wheatgrass, Indian ricegrass, mountain snowberry, muttongrass, prairie Junegrass
Land capability subclass (nonirrigated): 4c

Typical Profile:
0 to 15 inches; loam
15 to 36 inches; clay loam
36 to 60 inches; very cobbly sandy clay loam

Minor Components

Emlin and similar soils
Composition: About 8 percent
Landform: Hills
Position on landform: Footslope, toeslope

Zillion and similar soils
Composition: About 7 percent
Landform: Hills, valley floors
Position on landform: Toeslope, footslope

103—Iles loam, 3 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,800 to 7,400 feet (2,073 to 2,256 meters)
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Freeze-free period: 65 to 85 days

Map Unit Composition

Iles and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Iles soils

Landform: Plateaus
Parent material: Loess
Slope: 3 to 12 percent
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 9.1 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 55 percent
Gypsum maximum: None

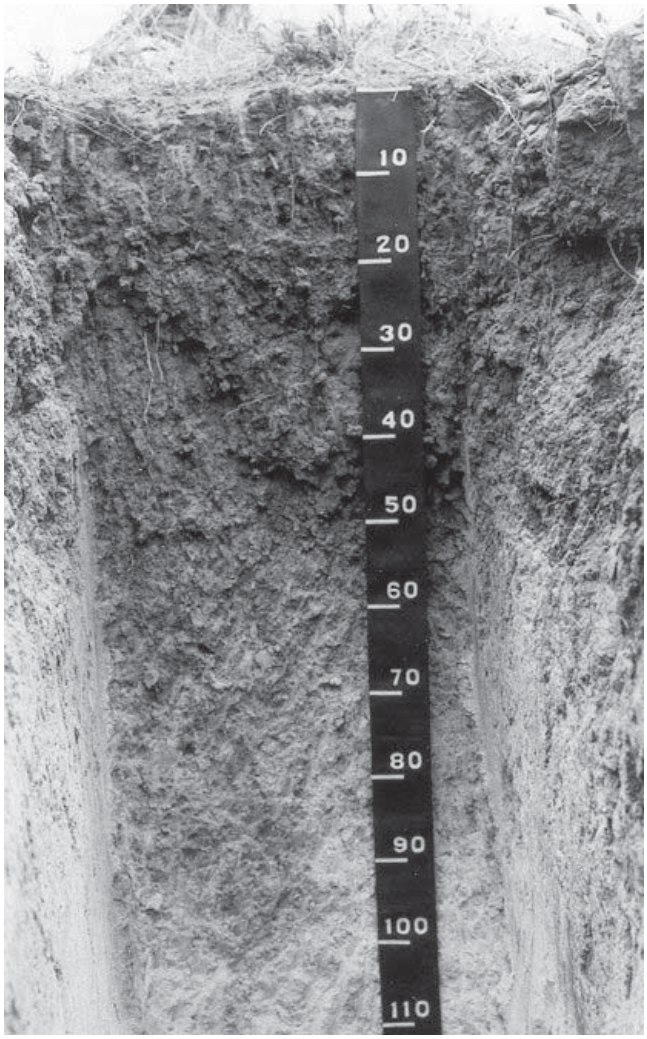

Figure 13.—A typical profile of Isles loam from map unit 103, Isles loam, 3 to 12 percent slopes. Depths shown are in centimeters.

Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam
Potential native vegetation: Letterman's needlegrass, slender wheatgrass, mountain big sagebrush, mountain brome, Saskatoon serviceberry, arrowleaf balsamroot, bottlebrush squirreltail, mountain snowberry, prairie Junegrass, yellow rabbitbrush
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 5 inches; loam
5 to 25 inches; silty clay loam
25 to 36 inches; clay loam
36 to 60 inches; silt loam

Minor Components

Morapos and similar soils
Composition: About 5 percent
Nortez and similar soils
Composition: About 5 percent

Maudlin and similar soils
Composition: About 5 percent

104—Ironco-Mulgon, dry complex, 25 to 50 percent slopes, extremely bouldery

Map Unit Setting

Major Land Resource Area: 47
Elevation: 7,000 to 8,000 feet (2,134 to 2,438 meters)
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Freeze-free period: 65 to 85 days

Map Unit Composition

Ironco and similar soils: 60 percent
Mulgon and similar soils: 25 percent
Minor components: 15 percent

Component Descriptions

Ironco soils

Landform: Mountainsides
Parent material: Colluvium derived from sandstone
Slope: 25 to 50 percent
Surface fragments: About 10 percent boulders, about 8 percent stones
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 4.6 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Stony Loam
Potential native vegetation: curlleaf mountain mahogany, Saskatoon serviceberry, mountain brome, slender wheatgrass, elk sedge, mountain big sagebrush, mountain snowberry, oniongrass, true mountain mahogany
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 10 inches; very bouldery loam
10 to 60 inches; very stony clay loam

Mulgon soils

Landform: Mountainsides
Parent material: Colluvium derived from sandstone
Slope: 25 to 50 percent, northern aspect
Surface fragments: About 3 percent stones, about 2 percent boulders
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 4.5 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Douglas Fir
Potential native vegetation:
Common trees: Rocky Mountain Douglas-fir
Other plants: elk sedge, mountain brome, nodding brome, Saskatoon serviceberry, mountain snowberry
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 1 inch; slightly decomposed plant material
1 inch to 16 inches; very stony sandy loam
16 to 32 inches; very stony sandy clay loam
32 to 60 inches; very stony sandy clay loam

Minor Components

Rock outcrop
Composition: About 8 percent

Shallow soils and similar soils
Composition: About 7 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)

105—Ironsprings loamy sand, 1 to 15 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,200 to 7,300 feet (1,890 to 2,225 meters)
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Ironsprings and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Ironsprings soils

Landform: Hillslopes, alluvial fans
Parent material: Alluvium derived from sandstone
Slope: 1 to 15 percent
Drainage class: Somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 5.0 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandy Foothills
Potential native vegetation: needleandthread, Wyoming big sagebrush, Indian ricegrass, antelope bitterbrush, western wheatgrass, arrowleaf balsamroot, bottlebrush squirreltail, prairie Junegrass
Land capability subclass (nonirrigated): 4e
Typical Profile:
0 to 14 inches; loamy sand
14 to 40 inches; sandy loam
40 to 60 inches; loamy sand

Minor Components

Berlake and similar soils
Composition: About 8 percent

Moderately deep soils over sandstone bedrock and similar soils
Composition: About 7 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)

106—Ironsprings loamy sand, 15 to 30 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,200 to 7,200 feet (1,890 to 2,195 meters)
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Ironsprings and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Ironsprings soils

Landform: Hillslopes
Parent material: Residuum derived from sandstone
Slope: 15 to 30 percent
Drainage class: Somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 4.9 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)

Ecological site: Deep Loam
Potential native vegetation: Wyoming big sagebrush, needleandthread, western wheatgrass, Indian ricegrass, mountain snowberry, muttongrass, prairie Junegrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 10 inches; loamy sand
10 to 36 inches; sandy loam
36 to 60 inches; loamy sand

Minor Components

Moderately deep soils over sandstone and similar soils
Composition: About 8 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)

Rock outcrop
Composition: About 7 percent

107—Ironsprings-Maysprings-Gretdivid complex, 10 to 20 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,800 to 7,300 feet (2,073 to 2,225 meters)
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Ironsprings and similar soils: 40 percent
Maysprings and similar soils: 25 percent
Gretdivid and similar soils: 15 percent
Minor components: 20 percent

Component Descriptions

Ironsprings soils

Landform: Hillslopes
Parent material: Colluvium derived from sandstone
Slope: 10 to 20 percent
Drainage class: Somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 4.8 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandyland
Potential native vegetation: antelope bitterbrush, Wyoming big sagebrush, needleandthread, Indian ricegrass, prairie Junegrass, western wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 14 inches; loamy coarse sand
14 to 40 inches; coarse sandy loam
40 to 60 inches; loamy coarse sand

Maysprings soils

Landform: Hills, hillslopes
Position on landform: Summit
Parent material: Residuum derived from sandstone
Slope: 10 to 20 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 5.5 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 2 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandyland
Potential native vegetation: antelope bitterbrush, Wyoming big sagebrush, needleandthread, Indian ricegrass, bluebunch wheatgrass, prairie Junegrass, western wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; loamy coarse sand
3 to 26 inches; sandy clay loam
26 to 36 inches; coarse sandy loam
36 to 60 inches; coarse sand

Gretdivid soils

Landform: Hillslopes, hills
Position on landform: Summit
Parent material: Residuum derived from sandstone
Slope: 10 to 20 percent
Drainage class: Somewhat excessively drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 3.4 inches (low)

Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandyland
Potential native vegetation: Wyoming big sagebrush, antelope bitterbrush, needleandthread, Indian ricegrass, western wheatgrass, bottlebrush squirreltail, prairie Junegrass, streambank wheatgrass, streambank wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; loamy coarse sand
3 to 7 inches; sandy clay loam
7 to 60 inches; coarse sand

Minor Components

Styers and similar soils
Composition: About 10 percent
Landform: Hillslopes

Maysprings soils with clay substrata and similar soils
Composition: About 10 percent
Landform: Hillslopes

108—Jerry-Cochetopa complex, 5 to 35 percent slopes

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 7,200 to 8,600 feet (2,195 to 2,621 meters)
Mean annual precipitation: 18 to 20 inches (457 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Jerry and similar soils: 50 percent
Cochetopa and similar soils: 35 percent
Minor components: 15 percent

Component Descriptions

Jerry soils

Landform: Mountainsides
Parent material: Residuum derived from shale
Slope: 5 to 35 percent
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 9.6 inches (high)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 4 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 1 (slightly sodic)
Ecological site: Brushy Loam
Potential native vegetation: Gambel's oak, Saskatoon serviceberry, elk sedge, mountain brome, Letterman's needlegrass, mountain snowberry, nodding brome, slender wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 2 inches; slightly decomposed plant material
2 to 12 inches; loam
12 to 23 inches; clay loam
23 to 29 inches; silty clay
29 to 60 inches; silty clay loam

Cochetopa soils

Landform: Mountainsides
Parent material: Residuum derived from shale
Slope: 5 to 35 percent
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 10.8 inches (high)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Brushy Loam
Potential native vegetation: Gambel's oak, Letterman's needlegrass, Saskatoon serviceberry, Woods' rose, elk sedge, mountain brome, mountain snowberry, nodding brome, slender wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 19 inches; loam
19 to 48 inches; clay loam
48 to 60 inches; clay loam

Minor Components

Waybe and similar soils
Composition: About 3 percent

Danavore and similar soils
Composition: About 3 percent

Lamphier and similar soils
Composition: About 3 percent

Skyway and similar soils
Composition: About 3 percent

Moderately deep soils and similar soils
Composition: About 3 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)

109—Joebas-Rock outcrop complex, 5 to 40 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 8,000 feet (1,829 to 2,438 meters)
Mean annual precipitation: 11 to 16 inches (279 to 406 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Joebas and similar soils: 60 percent
Rock outcrop: 30 percent
Minor components: 10 percent

Component Descriptions

Joebas soils

Landform: Small plateaus, structural benches on mountainsides
Parent material: Residuum derived from sandstone and quartzite
Slope: 5 to 25 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 1.7 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 1 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandy Juniper
Potential native vegetation:
Common trees: Utah juniper, twoneedle pinyon
Other plants: bluebunch wheatgrass, needleandthread, Indian ricegrass, Wyoming big sagebrush, antelope bitterbrush, bottlebrush squirreltail, western wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 7 inches; gravelly sandy loam
7 to 13 inches; gravelly sandy clay loam
13 to 16 inches; gravelly sandy clay loam
16 to 20 inches; unweathered bedrock

Rock outcrop

Description: Rock outcrop consists of a combination of escarpments and ledges, and massive slab rock with 0 to 4 inches of soil material covering the rock. Pinyon pine and juniper trees commonly grow in the fractures in the rock outcrop.
Landform: Vertical escarpments on mountainsides, plateaus
Exposed bedrock on mountainsides, plateaus
Slope: 5 to 40 percent
Depth to restrictive feature: 0 inches to bedrock (lithic)
Available water capacity: About 0.0 inches (very low)
Runoff class: Very high
Salinity maximum: About 0 mmhos/cm (nonsaline)
Land capability subclass (nonirrigated): 8

Minor Components

Moderately deep soils and similar soils
Composition: About 10 percent
Landform: Depressions, mountains
Position on landform: Footslope
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)

110—Kemmerer silty clay loam, 12 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 7,000 feet (1,829 to 2,134 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Kemmerer and similar soils: 80 percent
Minor components: 20 percent

Component Descriptions

Kemmerer soils

Landform: Hills
Parent material: Residuum derived from shale
Slope: 12 to 25 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 3.6 inches (low)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 15 percent
Gypsum maximum: About 5 percent
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 2 (slightly sodic)
Ecological site: Clayey Slopes
Potential native vegetation: western wheatgrass, saline wildrye, shadscale saltbush, Indian ricegrass, Sandberg bluegrass, Wyoming big sagebrush, prairie Junegrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; silty clay loam
3 to 22 inches; clay
22 to 26 inches; weathered bedrock

Minor Components

Pinelli and similar soils
Composition: About 5 percent

Moyerson and similar soils
Composition: About 5 percent

Yamo and similar soils
Composition: About 5 percent

Rock outcrop
Composition: About 5 percent

111—Kemmerer-Grapit complex, 15 to 65 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,200 to 7,000 feet (1,890 to 2,134 meters)
Mean annual precipitation: 13 to 14 inches (330 to 356 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Kemmerer and similar soils: 50 percent
Grapit and similar soils: 35 percent
Minor components: 15 percent

Component Descriptions

Kemmerer soils

Landform: Hills
Parent material: Residuum derived from shale
Slope: 25 to 65 percent, southern aspect
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 3.7 inches (low)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 15 percent
Gypsum maximum: About 5 percent
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 2 (slightly sodic)
Ecological site: Juniperus osteosperma-Pinus edulis/ Pleuraphis jamesii
Potential native vegetation:
Common trees: twoneedle pinyon, Utah juniper
Other plants: western wheatgrass, Indian ricegrass, Sandberg bluegrass, bottlebrush squirreltail, prairie Junegrass, shadscale saltbush, streambank wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 8 inches; very gravelly clay loam
8 to 27 inches; clay
27 to 31 inches; weathered bedrock

Grapit soils

Landform: Hills
Parent material: Colluvium derived from conglomerate
Slope: 15 to 40 percent, northern aspect
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 5.7 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 50 percent

Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Juniperus osteosperma-Pinus edulis/ Pleuraphis jamesii
Potential native vegetation:
Common trees: twoneedle pinyon, Utah juniper
Other plants: saline wildrye, Nevada bluegrass, prairie Junegrass, western wheatgrass, bluebunch wheatgrass, mountain big sagebrush, true mountain mahogany
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 3 inches; very cobbly sandy loam
3 to 35 inches; very gravelly clay loam
35 to 60 inches; extremely gravelly sandy clay loam

Minor Components

Soils on north slopes that have less than 18 percent clay and similar soils
Composition: About 5 percent

Crago and similar soils
Composition: About 5 percent
Landform: Hills
Position on landform: Shoulder, summit

Moyerson soils on steep south slopes and similar soils
Composition: About 5 percent

112—Kemmerer-Moyerson complex, 20 to 40 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 7,000 feet (1,829 to 2,134 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Kemmerer and similar soils: 45 percent
Moyerson and similar soils: 40 percent
Minor components: 15 percent

Component Descriptions

Kemmerer soils

Landform: Hills
Parent material: Residuum derived from shale
Slope: 20 to 40 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 3.6 inches (low)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 15 percent
Gypsum maximum: About 5 percent
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 2 (slightly sodic)
Ecological site: Clayey Slopes
Potential native vegetation: western wheatgrass, saline wildrye, shadscale saltbush, Indian ricegrass, Sandberg bluegrass, Wyoming big sagebrush, prairie Junegrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 3 inches; silty clay loam
3 to 22 inches; clay
22 to 26 inches; weathered bedrock

Moyerson soils

Landform: Hills
Parent material: Residuum derived from shale
Slope: 20 to 40 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 2.2 inches (very low)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 4 percent
Gypsum maximum: About 5 percent
Salinity maximum: About 8 mmhos/cm (slightly saline)
Sodium adsorption ratio maximum: About 3 (slightly sodic)
Ecological site: Clayey Slopes
Potential native vegetation: western wheatgrass, saline wildrye, bottlebrush squirreltail, shadscale

saltbush, Indian ricegrass, Wyoming big sagebrush, prairie Junegrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 1 inch; silty clay loam
1 inch to 17 inches; silty clay
17 to 21 inches; weathered bedrock

Minor Components

Pinelli and similar soils
Composition: About 8 percent

Deep soils and similar soils
Composition: About 7 percent

113—Kemmerer-Yamo complex, 5 to 30 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,100 to 7,200 feet (1,859 to 2,195 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Kemmerer and similar soils: 60 percent
Yamo and similar soils: 20 percent
Minor components: 20 percent

Component Descriptions

Kemmerer soils

Landform: Hills
Parent material: Residuum derived from shale
Slope: 5 to 30 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 3.6 inches (low)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 15 percent
Gypsum maximum: About 5 percent
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 2 (slightly sodic)
Ecological site: Clayey Slopes
Potential native vegetation: western wheatgrass, saline wildrye, shadscale saltbush, Indian ricegrass, Sandberg bluegrass, Wyoming big sagebrush, prairie Junegrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; silty clay loam
3 to 22 inches; clay
22 to 26 inches; weathered bedrock

Yamo soils

Landform: Hills
Parent material: Residuum derived from sandstone and in loess
Slope: 5 to 30 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 9.9 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 1 (slightly sodic)
Ecological site: Clayey Foothills
Potential native vegetation: western wheatgrass, Wyoming big sagebrush, bluebunch wheatgrass, yellow rabbitbrush
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 5 inches; loam
5 to 15 inches; loam
15 to 38 inches; loam
38 to 60 inches; loam

Minor Components

Moyerson and similar soils
Composition: About 8 percent

Pinelli and similar soils
Composition: About 7 percent

Forelle and similar soils
Composition: About 5 percent

114—Lamphier fine sandy loam, 3 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 48A

Elevation: 7,000 to 8,600 feet (2,134 to 2,621 meters)
Mean annual precipitation: 18 to 20 inches (457 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Lamphier and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Lamphier soils

Landform: Mountainsides
Parent material: Colluvium and residuum derived from sandstone
Slope: 3 to 25 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 8.7 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Brushy Loam
Potential native vegetation: Gambel's oak, Saskatoon serviceberry, elk sedge, mountain snowberry, Letterman's needlegrass, mountain brome, nodding brome, slender wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 2 inches; moderately decomposed plant material
2 to 24 inches; fine sandy loam
24 to 60 inches; sandy clay loam

Minor Components

Foidel and similar soils
Composition: About 8 percent

Clayburn and similar soils
Composition: About 7 percent

115—Lamphier fine sandy loam, 25 to 65 percent slopes

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 7,000 to 8,600 feet (2,134 to 2,621 meters)
Mean annual precipitation: 18 to 20 inches (457 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Lamphier and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Lamphier soils

Landform: Mountainsides
Parent material: Colluvium and residuum derived from sandstone
Slope: 25 to 65 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 8.7 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Brushy Loam
Potential native vegetation: Gambel's oak, Saskatoon serviceberry, elk sedge, mountain snowberry, Letterman's needlegrass, mountain brome, nodding brome, slender wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 2 inches; moderately decomposed plant material
2 to 24 inches; fine sandy loam
24 to 60 inches; sandy clay loam

Minor Components

Foidel and similar soils
Composition: About 5 percent

Clayburn and similar soils
Composition: About 5 percent

Skyway and similar soils
Composition: About 5 percent

116—Lamphier-Jerry complex, 3 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 7,200 to 8,600 feet (2,195 to 2,621 meters)
Mean annual precipitation: 18 to 20 inches (457 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Lamphier and similar soils: 45 percent
Jerry and similar soils: 30 percent
Minor components: 25 percent

Component Descriptions

Lamphier soils

Landform: Plateaus, mountainsides
Parent material: Colluvium and residuum derived from sandstone
Slope: 3 to 25 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 8.7 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Brushy Loam
Potential native vegetation: Gambel's oak, Saskatoon serviceberry, elk sedge, mountain snowberry, Letterman's needlegrass, mountain brome, nodding brome, slender wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 2 inches; moderately decomposed plant material
2 to 24 inches; fine sandy loam
24 to 60 inches; sandy clay loam

Jerry soils

Landform: Mountainsides, plateaus
Parent material: Residuum derived from shale
Slope: 3 to 25 percent
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 9.9 inches (high)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: High
Calcium carbonate maximum: About 4 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 1 (slightly sodic)
Ecological site: Brushy Loam
Potential native vegetation: Gambel's oak, Saskatoon serviceberry, elk sedge, mountain brome, Letterman's needlegrass, mountain snowberry, nodding brome, slender wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 10 inches; loam
10 to 21 inches; clay loam
21 to 27 inches; silty clay
27 to 60 inches; silty clay loam

Minor Components

Danavore and similar soils
Composition: About 10 percent

Skyway and similar soils
Composition: About 8 percent

Moderately deep soils with more than 35 percent rocks and similar soils
Composition: About 7 percent

Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)

117—Lamphier-Jerry complex, 25 to 65 percent slopes

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 7,200 to 8,600 feet (2,195 to 2,621 meters)
Mean annual precipitation: 18 to 20 inches (457 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Lamphier and similar soils: 45 percent
Jerry and similar soils: 30 percent
Minor components: 25 percent

Component Descriptions

Lamphier soils

Landform: Mountainsides, plateaus
Parent material: Colluvium and residuum derived from sandstone
Slope: 25 to 65 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 8.7 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Brushy Loam
Potential native vegetation: Gambel's oak, Saskatoon serviceberry, elk sedge, mountain snowberry, Letterman's needlegrass, mountain brome, nodding brome, slender wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 2 inches; moderately decomposed plant material
2 to 24 inches; fine sandy loam
24 to 60 inches; sandy clay loam

Jerry soils

Landform: Mountainsides, plateaus
Parent material: Colluvium and residuum derived from shale
Slope: 25 to 65 percent
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 9.9 inches (high)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 4 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 1 (slightly sodic)
Ecological site: Brushy Loam
Potential native vegetation: Gambel's oak, Saskatoon serviceberry, elk sedge, mountain brome, Letterman's needlegrass, mountain snowberry, nodding brome, slender wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 10 inches; loam
10 to 21 inches; clay loam
21 to 27 inches; silty clay
27 to 60 inches; silty clay loam

Minor Components

Rock outcrop
Composition: About 7 percent

Danavore and similar soils
Composition: About 6 percent

Skyway and similar soils
Composition: About 6 percent

Moderately deep soils and similar soils
Composition: About 6 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)

118—Lander loam, 0 to 3 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 7,000 feet (1,829 to 2,134 meters)
Mean annual precipitation: 12 to 16 inches (305 to 406 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Lander and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Lander soils

Landform: Flood plains
Parent material: Alluvium derived from mixed sources
Slope: 0 to 3 percent
Drainage class: Somewhat poorly drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 8.9 inches (moderate)
Shrink-swell potential: About 4.5 percent (moderate)
Flooding hazard: Rare
Seasonal high water table depth: About 30 to 42 inches
Runoff class: Medium
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: River Bottom
Potential native vegetation: basin wildrye, western wheatgrass, slender wheatgrass, Nebraska sedge
Land capability subclass (irrigated): 4c
Land capability subclass (nonirrigated): 4c

Typical Profile:
0 to 10 inches; loam
10 to 44 inches; stratified fine sandy loam to clay loam
44 to 55 inches; fine sand
55 to 60 inches; extremely gravelly sand

Minor Components

Haplaquolls and similar soils
Composition: About 5 percent
Landform: Oxbows

Apmay and similar soils
Composition: About 5 percent

Battlement and similar soils
Composition: About 5 percent

119—Langspring sandy loam, 3 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 7,000 feet (1,829 to 2,134 meters)
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Langspring and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Langspring soils

Landform: Plateaus
Parent material: Loess over residuum derived from sandstone
Slope: 3 to 12 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 8.8 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 40 percent
Gypsum maximum: About 2 percent
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Loamy 7-10" PPT
Potential native vegetation: Wyoming big sagebrush, streambank wheatgrass, Indian ricegrass, bottlebrush squirreltail, shadscale saltbush, streambank wheatgrass, needleandthread, western wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; sandy loam
3 to 17 inches; sandy clay loam
17 to 60 inches; sandy clay loam

Minor Components

Baston and similar soils
Composition: About 8 percent

Sandwash and similar soils
Composition: About 7 percent

120—Layoint-Moosed-Berlake complex, 1 to 20 percent slopes

Map Unit Setting

Major Land Resource Area: 47
Elevation: 7,300 to 8,000 feet (2,225 to 2,438 meters)
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Layoint and similar soils: 35 percent
Moosed and similar soils: 25 percent
Berlake and similar soils: 20 percent
Minor components: 20 percent

Component Descriptions

Layoint soils

Landform: Plateaus
Position on landform: Summit
Parent material: Eolian deposits and residuum derived from sandstone
Slope: 1 to 8 percent
Depth to restrictive feature: 24 to 40 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 3.5 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandy Foothill
Potential native vegetation: needleandthread, mountain big sagebrush, Indian ricegrass, western wheatgrass, antelope bitterbrush, bottlebrush squirreltail
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 14 inches; loamy fine sand
14 to 32 inches; loamy fine sand
32 to 36 inches; unweathered bedrock

Moosed soils

Landform: Plateaus
Position on landform: Backslope, shoulder
Parent material: Colluvium and residuum derived from sandstone
Slope: 1 to 20 percent
Depth to restrictive feature: 7 to 20 inches to bedrock (lithic)
Drainage class: Excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 1.5 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandy Foothill
Potential native vegetation: needleandthread, Wyoming big sagebrush, Indian ricegrass, antelope bitterbrush, bottlebrush squirreltail, galleta
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 7 inches; loamy fine sand
7 to 15 inches; loamy fine sand
15 to 18 inches; channery sand
18 to 22 inches; unweathered bedrock

Berlake soils

Landform: Plateaus, drainageways
Parent material: Alluvium and residuum derived from sandstone
Slope: 1 to 15 percent, northern aspect
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 9.0 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)

Ecological site: Deep Loam
Potential native vegetation: needleandthread, western wheatgrass, mountain big sagebrush, Indian ricegrass, common snowberry, mountain snowberry, muttongrass, prairie Junegrass
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 8 inches; fine sandy loam
8 to 42 inches; sandy clay loam
42 to 60 inches; sandy clay loam

Minor Components

Maybell and similar soils
Composition: About 7 percent
Landform: Drainageways

Dark surfaced, deep, sandy soils and similar soils
Composition: About 7 percent
Landform: Drainageways

Moderately deep sandy soils and similar soils
Composition: About 6 percent
Landform: Convex summits on plateaus
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)

121—Leaps clay loam, 3 to 15 percent slopes, very stony

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 7,600 to 8,600 feet (2,316 to 2,621 meters)
Mean annual precipitation: 20 to 22 inches (508 to 559 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Leaps and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Leaps soils

Landform: Mountainsides
Parent material: Colluvium derived from shale
Slope: 3 to 15 percent
Surface fragments: About 2 percent stones
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 9.7 inches (high)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Aspen Woodland
Potential native vegetation:
Common trees: quaking aspen
Other plants: mountain brome, nodding brome, quaking aspen, Fendler's meadowrue, blue wildrye, elk sedge, slender wheatgrass
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 1 inch; slightly decomposed plant material
1 inch to 15 inches; clay loam
15 to 39 inches; clay
39 to 60 inches; clay

Minor Components

Soils with seasonal high water tables and similar soils
Composition: About 5 percent
Landform: On or near landslides

Soils with dark surfaces 16 to 20 inches thick and similar soils
Composition: About 5 percent

122—Leswill-Rogrube complex, 1 to 7 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,600 to 7,200 feet (2,012 to 2,194 meters)
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Leswill and similar soils: 50 percent
Rogrube and similar soils: 30 percent
Minor components: 20 percent

Component Descriptions

Leswill soils

Landform: Concave and nearly level areas on dissected plateaus

Parent material: Residuum derived from gypsiferous shale
Slope: 1 to 7 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 11.2 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 5 percent
Gypsum maximum: About 15 percent
Salinity maximum: About 16 mmhos/cm (moderately saline)
Sodium adsorption ratio maximum: About 35 (strongly sodic)
Ecological site: Alkali Upland
Potential native vegetation: saltbush, streambank wheatgrass, streambank wheatgrass, western wheatgrass, Indian ricegrass, bottlebrush squirreltail, shadscale saltbush
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 5 inches; clay loam
5 to 14 inches; clay loam
14 to 41 inches; silty clay loam
41 to 75 inches; silty clay loam

Rogrube soils

Landform: Slightly convex and nearly level areas on dissected plateaus
Parent material: Residuum derived from gypsiferous shale
Slope: 1 to 7 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 9.9 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 35 percent
Gypsum maximum: About 15 percent
Salinity maximum: About 8 mmhos/cm (slightly saline)
Sodium adsorption ratio maximum: About 8 (slightly sodic)
Ecological site: Loamy 7-10" PPT
Potential native vegetation: Wyoming big sagebrush, streambank wheatgrass, Indian ricegrass, bottlebrush squirreltail, needleandthread, shadscale saltbush, western wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; loam
3 to 28 inches; clay loam
28 to 60 inches; sandy clay loam

Minor Components

Beamton and similar soils
Composition: About 7 percent
Landform: Moderately and strongly sloping convex slopes on dissected plateaus

Boltus and similar soils
Composition: About 7 percent
Landform: Moderately and strongly sloping convex slopes on dissected plateaus

Deep clayey soils and similar soils
Composition: About 6 percent
Landform: Small intermittent lakebeds

123—Lilsnake-Sandwash complex, 3 to 20 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 7,000 feet (1,829 to 2,134 meters)
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Lilsnake and similar soils: 45 percent
Sandwash and similar soils: 30 percent
Minor components: 25 percent

Component Descriptions

Lilsnake soils

Landform: Hillslopes, plateaus
Parent material: Residuum derived from sandstone
Slope: 3 to 20 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 2.9 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 50 percent

Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Loamy 7-10" PPT
Potential native vegetation: shadscale saltbush, Indian ricegrass, Wyoming big sagebrush, needleandthread, streambank wheatgrass, streambank wheatgrass, western wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 4 inches; loam
4 to 15 inches; loam
15 to 19 inches; gravelly clay loam
19 to 23 inches; unweathered bedrock

Sandwash soils

Landform: Plateaus
Parent material: Residuum derived from sandstone
Slope: 3 to 10 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 3.6 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 70 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 2 (slightly sodic)
Ecological site: Loamy 7-10" PPT
Potential native vegetation: Wyoming big sagebrush, bottlebrush squirreltail, shadscale saltbush, streambank wheatgrass, streambank wheatgrass, Indian ricegrass, Nevada bluegrass, bluebunch wheatgrass, needleandthread, western wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 4 inches; loam
4 to 16 inches; loam
16 to 35 inches; very channery loam
35 to 39 inches; unweathered bedrock

Minor Components

Fondillas and similar soils
Composition: About 13 percent
Landform: Breaks
Diaflats and similar soils
Composition: About 12 percent
Landform: Hillslopes
Position on landform: Footslope

124—Losee-Thornburgh dry, complex, 25 to 65 percent slopes

Map Unit Setting

Major Land Resource Area: 47
Elevation: 7,500 to 9,500 feet (2,286 to 2,896 meters)
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Losee and similar soils: 45 percent
Thornburgh and similar soils: 30 percent
Minor components: 25 percent

Component Descriptions

Losee soils

Landform: Convex windswept areas on mountainsides
Parent material: Colluvium derived from relict fluvial deposits
Slope: 25 to 65 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 4.5 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Dry Exposure
Potential native vegetation: black sagebrush,

bluebunch wheatgrass, needleandthread, prairie Junegrass, western wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 5 inches; very cobbly sandy loam
5 to 24 inches; very cobbly sandy clay loam
24 to 40 inches; very cobbly sandy clay loam
40 to 60 inches; very cobbly sandy loam

Thornburgh soils

Landform: Concave and snow catchment areas on mountainsides
Parent material: Colluvium derived from relict fluvial deposits
Slope: 25 to 65 percent
Drainage class: Well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 4.4 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Stony Loam
Potential native vegetation: western wheatgrass, antelope bitterbrush, bluebunch wheatgrass, mountain big sagebrush, prairie Junegrass, Indian ricegrass, muttongrass, needleandthread
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 14 inches; very cobbly sandy loam
14 to 60 inches; very cobbly sandy loam

Minor Components

Shallow to deep extremely cobbly soils and similar soils
Composition: About 13 percent
Landform: Very steep convex slopes on ridges, mountainsides
Slope: 45 to 65 percent
Depth to restrictive feature: 10 to 60 inches to bedrock (lithic)

Libeg and similar soils
Composition: About 6 percent
Landform: Concave slopes on mountainsides

Forsey and similar soils
Composition: About 6 percent
Landform: Concave slopes on mountainsides

125—Massadona silty clay loam, 0 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,400 to 6,000 feet (1,646 to 1,829 meters)
Mean annual precipitation: 9 to 10 inches (229 to 254 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Freeze-free period: 90 to 105 days

Map Unit Composition

Massadona and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Massadona soils

Landform: Hills, alluvial fans
Position on landform: Toeslope
Parent material: Alluvium derived from shale
Slope: 0 to 12 percent
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 9.0 inches (moderate)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 8 percent
Gypsum maximum: About 5 percent
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 3 (slightly sodic)
Ecological site: Clayey Slopes
Potential native vegetation: western wheatgrass, Gardner's saltbush, saline wildrye, shadscale saltbush, mat saltbush, Wyoming big sagebrush, bottlebrush squirreltail
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 3 inches; silty clay loam
3 to 50 inches; silty clay
50 to 60 inches; silty clay

Minor Components

Turzo and similar soils
Composition: About 8 percent
Landform: Alluvial fans

Deaver and similar soils
Composition: About 7 percent
Landform: Hills
Position on landform: Toeslope

126—Massadona-Youngston moist, complex, 1 to 8 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,700 to 6,300 feet (1,737 to 1,920 meters)
Mean annual precipitation: 10 to 11 inches (254 to 279 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Freeze-free period: 95 to 105 days

Map Unit Composition

Massadona and similar soils: 65 percent
Youngston and similar soils: 20 percent
Minor components: 15 percent

Component Descriptions

Massadona soils

Landform: Hills
Position on landform: Toeslope
Parent material: Alluvium derived from shale
Slope: 2 to 8 percent
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 8.9 inches (moderate)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 8 percent
Gypsum maximum: About 5 percent
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 3 (slightly sodic)
Ecological site: Semidesert Clay Loam
Potential native vegetation: western wheatgrass, Wyoming big sagebrush, saline wildrye, bottlebrush squirreltail, prairie Junegrass, shadscale saltbush
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 5 inches; loam
5 to 35 inches; silty clay loam
35 to 60 inches; silty clay loam

Youngston soils

Landform: Flood plains
Parent material: Alluvium derived from mixed sources
Slope: 1 to 3 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 11.8 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Flooding hazard: Rare
Runoff class: Medium
Calcium carbonate maximum: About 15 percent
Gypsum maximum: About 4 percent
Salinity maximum: About 8 mmhos/cm (slightly saline)
Sodium adsorption ratio maximum: About 12 (slightly sodic)
Ecological site: Foothill Swale
Potential native vegetation: basin wildrye, basin big sagebrush, streambank wheatgrass, western wheatgrass, winterfat
Land capability subclass (irrigated): 4c
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 2 inches; loam
2 to 60 inches; stratified very fine sandy loam to clay loam

Minor Components

Eghelm soils and similar soils
Composition: About 8 percent
Landform: Flood plains

Massadona and similar soils
Composition: About 7 percent
Landform: Hills
Position on landform: Toeslope

127—Maudlin-Duffymont complex, 3 to 15 percent slopes, very stony

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 6,500 to 8,000 feet (1,981 to 2,438 meters)
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Freeze-free period: 65 to 85 days

Map Unit Composition

Maudlin and similar soils: 50 percent
Duffymont and similar soils: 30 percent
Minor components: 20 percent

Component Descriptions

Maudlin soils

Landform: Plateaus
Parent material: Residuum derived from sandstone
Slope: 3 to 15 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 4.3 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam
Potential native vegetation: Letterman's needlegrass, mountain big sagebrush, elk sedge, nodding brome, mountain brome, mountain snowberry, slender wheatgrass
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 12 inches; fine sandy loam
12 to 21 inches; sandy clay loam
21 to 30 inches; gravelly fine sandy loam
30 to 34 inches; unweathered bedrock

Duffymont soils

Landform: Plateaus
Parent material: Residuum derived from sandstone
Slope: 3 to 15 percent
Surface fragments: About 25 percent stones
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 0.6 inch (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Loamy Breaks
Potential native vegetation: mountain big sagebrush, western wheatgrass, antelope bitterbrush, true mountain mahogany, Indian ricegrass, Nevada bluegrass, Saskatoon serviceberry, bluebunch wheatgrass, needleandthread
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 4 inches; very stony fine sandy loam
4 to 11 inches; extremely stony fine sandy loam
11 to 15 inches; unweathered bedrock

Minor Components

Tolman and similar soils
Composition: About 5 percent

Hesperus and similar soils
Composition: About 5 percent

Nortez and similar soils
Composition: About 5 percent

Morapos and similar soils
Composition: About 5 percent

128—Maybell sand, 3 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 6,800 feet (1,829 to 2,073 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Maybell and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Maybell soils

Landform: Hills
Parent material: Eolian deposits
Slope: 3 to 12 percent
Drainage class: Excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Available water capacity: About 4.9 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very low
Calcium carbonate maximum: About 2 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandhills
Potential native vegetation: antelope bitterbrush, silver sagebrush, Indian ricegrass, needleandthread, Wyoming big sagebrush, rabbitbrush, sand dropseed, western wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; sand
3 to 20 inches; loamy sand
20 to 60 inches; sand

Minor Components

Coyet and similar soils
Composition: About 10 percent

129—Maybell sand, 12 to 45 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 6,800 feet (1,829 to 2,073 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Maybell and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Maybell soils

Landform: Hills
Parent material: Eolian deposits
Slope: 12 to 45 percent
Drainage class: Excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Available water capacity: About 4.9 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 2 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandhills
Potential native vegetation: antelope bitterbrush, silver sagebrush, Indian ricegrass, needleandthread, Wyoming big sagebrush, rabbitbrush, sand dropseed, western wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 3 inches; sand
3 to 15 inches; sand
15 to 60 inches; sand

Minor Components

Maybell and similar soils
Composition: About 10 percent
Slope: 3 to 12 percent

130—Maysprings coarse sandy loam, 3 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,200 to 7,300 feet (1,890 to 2,225 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Maysprings and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Maysprings soils

Landform: Hills, plateaus
Position on landform: Toeslope
Parent material: Alluvium and residuum derived from sandstone
Slope: 3 to 12 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 5.2 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 2 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Rolling Loam
Potential native vegetation: Wyoming big sagebrush, needleandthread, bluebunch wheatgrass, bottlebrush squirreltail, prairie Junegrass, western wheatgrass, yellow rabbitbrush
Land capability subclass (nonirrigated): 4c

Typical Profile:
0 to 7 inches; coarse sandy loam
7 to 22 inches; sandy clay loam
22 to 34 inches; coarse sandy loam
34 to 60 inches; coarse sand

Minor Components

Rock River and similar soils
Composition: About 3 percent

Gretivid and similar soils
Composition: About 3 percent

Ryark and similar soils
Composition: About 3 percent

Berlake and similar soils
Composition: About 3 percent

Soils with clay substrata and similar soils
Composition: About 3 percent

131—Maysprings-Gretdivid complex, 10 to 20 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,200 to 7,200 feet (1,890 to 2,195 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Maysprings and similar soils: 50 percent
Gretdivid and similar soils: 30 percent
Minor components: 20 percent

Component Descriptions

Maysprings soils

Landform: Hills
Position on landform: Footslope
Parent material: Residuum derived from sandstone
Slope: 10 to 20 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 5.0 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 2 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandyland
Potential native vegetation: antelope bitterbrush, Wyoming big sagebrush, needleandthread, Indian ricegrass, bluebunch wheatgrass, prairie Junegrass, western wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 7 inches; loamy coarse sand
7 to 22 inches; sandy clay loam
22 to 34 inches; coarse sandy loam
34 to 60 inches; coarse sand

Gretdivid soils

Landform: Hills
Position on landform: Summit, backslope
Parent material: Residuum derived from sandstone
Slope: 10 to 20 percent
Drainage class: Somewhat excessively drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 3.4 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None

Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandyland
Potential native vegetation: Wyoming big sagebrush, antelope bitterbrush, needleandthread, Indian ricegrass, western wheatgrass, bottlebrush squirreltail, prairie Junegrass, streambank wheatgrass, streambank wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; loamy coarse sand
3 to 7 inches; sandy clay loam
7 to 60 inches; coarse sand

Minor Components

Styers and similar soils
Composition: About 4 percent

Rock River and similar soils
Composition: About 4 percent

Ryan Park and similar soils
Composition: About 4 percent

Taffom and similar soils
Composition: About 4 percent

Maybell and similar soils
Composition: About 4 percent

132—Milren fine sandy loam, 0 to 10 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,200 to 6,900 feet (1,890 to 2,103 meters)
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Milren and similar soils: 80 percent
Minor components: 20 percent

Component Descriptions

Milren soils

Landform: Hills
Position on landform: Toeslope, footslope
Parent material: Alluvium derived from shale and sandstone
Slope: 0 to 10 percent
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 10.1 inches (high)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Claypan
Potential native vegetation: alkali sagebrush, western wheatgrass, bluebunch wheatgrass, prairie Junegrass
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 6 inches; fine sandy loam
6 to 20 inches; clay loam
20 to 60 inches; clay loam

Minor Components

Styers and similar soils
Composition: About 5 percent
Landform: Hillslopes

Pinelli and similar soils
Composition: About 5 percent
Landform: Hills
Position on landform: Footslope

Rock River and similar soils
Composition: About 5 percent
Landform: Hills
Position on landform: Footslope

Obadia and similar soils
Composition: About 5 percent
Landform: Hills
Position on landform: Toeslope

133—Miracle-Coldspring complex, 3 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 47
Elevation: 7,500 to 8,500 feet (2,286 to 2,591 meters)

Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Miracle and similar soils: 50 percent
Coldspring and similar soils: 30 percent
Minor components: 20 percent

Component Descriptions

Miracle soils

Landform: Convex and concave areas on plateaus
Parent material: Residuum derived from sandstone
Slope: 3 to 12 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 5.5 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 1 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam
Potential native vegetation: Letterman's needlegrass, slender wheatgrass, mountain big sagebrush, elk sedge, mountain brome, mountain snowberry, nodding brome
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 8 inches; sandy loam
8 to 37 inches; sandy clay loam
37 to 41 inches; unweathered bedrock

Coldspring soils

Landform: Concave areas on plateaus
Parent material: Residuum derived from sandstone
Slope: 3 to 12 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 7.6 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam
Potential native vegetation: Letterman's needlegrass, slender wheatgrass, mountain big sagebrush, elk sedge, mountain brome, mountain snowberry, nodding brome, prairie Junegrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 14 inches; loam
14 to 34 inches; clay loam
34 to 47 inches; gravelly sandy clay loam
47 to 51 inches; unweathered bedrock

Minor Components

Carbol and similar soils
Composition: About 5 percent
Landform: Convex slopes on plateaus

Irigul and similar soils
Composition: About 5 percent
Landform: Convex slopes on plateaus

Shallow, very channery soils and similar soils
Composition: About 5 percent
Landform: Convex slopes adjacent to rock outcrops on plateaus
Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)

Rock outcrop
Composition: About 5 percent

134—Morapos loam, 3 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 6,400 to 7,600 feet (1,951 to 2,316 meters)
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Freeze-free period: 65 to 85 days

Map Unit Composition

Morapos and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Morapos soils

Landform: Plateaus
Parent material: Residuum derived from shale and in loess
Slope: 3 to 12 percent
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 9.1 inches (high)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 3 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 2 (slightly sodic)
Ecological site: Mountain Loam
Potential native vegetation: Letterman's needlegrass, mountain big sagebrush, mountain snowberry, slender wheatgrass, Saskatoon serviceberry, prairie Junegrass, western wheatgrass
Land capability subclass (irrigated): 4e
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 10 inches; loam
10 to 28 inches; clay loam
28 to 60 inches; clay loam

Minor Components

Nortez and similar soils
Composition: About 8 percent

Campspass and similar soils
Composition: About 7 percent

135—Morapos loam, 12 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 6,400 to 7,600 feet (1,951 to 2,316 meters)
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Freeze-free period: 65 to 85 days

Map Unit Composition

Morapos and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Morapos soils

Landform: Mountainsides
Parent material: Residuum derived form shale
Slope: 12 to 25 percent
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 9.1 inches (high)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 3 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 2 (slightly sodic)
Ecological site: Mountain Loam
Potential native vegetation: Letterman's needlegrass, mountain big sagebrush, mountain snowberry, slender wheatgrass, Saskatoon serviceberry, prairie Junegrass, western wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 10 inches; loam
10 to 28 inches; clay loam
28 to 60 inches; clay loam

Minor Components

Nortez and similar soils
Composition: About 8 percent

Campspass and similar soils
Composition: About 7 percent

136—Morapos-Pagoda complex, 2 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 6,600 to 7,200 feet (2,012 to 2,195 meters)
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Freeze-free period: 65 to 85 days

Map Unit Composition

Morapos and similar soils: 40 percent
Pagoda and similar soils: 40 percent
Minor components: 20 percent

Component Descriptions

Morapos soils

Landform: Convex slopes on hills
Parent material: Residuum derived from shale
Slope: 2 to 12 percent
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 8.9 inches (moderate)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 2 (slightly sodic)
Ecological site: Deep Clay Loam
Potential native vegetation: western wheatgrass, Letterman's needlegrass, mountain big sagebrush, muttongrass, slender wheatgrass, Saskatoon serviceberry, mountain snowberry, prairie Junegrass
Land capability subclass (irrigated): 4e
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 9 inches; clay loam
9 to 23 inches; clay
23 to 60 inches; clay loam

Pagoda soils

Landform: Concave slopes on hills
Parent material: Alluvium and residuum derived from shale
Slope: 2 to 12 percent
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 10.6 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Very high
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam
Potential native vegetation: Letterman's needlegrass, slender wheatgrass, mountain brome, Utah serviceberry, mountain big sagebrush, mountain snowberry, nodding brome
Land capability subclass (irrigated): 4e
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 9 inches; loam
9 to 17 inches; clay loam
17 to 31 inches; clay
31 to 60 inches; clay loam

Minor Components

Pinelli and similar soils
Composition: About 5 percent
Landform: Steep south-facing slopes on hills
Position on landform: Summit

Herm and similar soils
Composition: About 5 percent
Landform: Convex slopes on hills

Hesperus and similar soils
Composition: About 5 percent
Landform: Swales

Fughes and similar soils
Composition: About 5 percent
Landform: Concave slopes on hills

137—Morset-Youga complex, 3 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 47
Elevation: 7,500 to 8,500 feet (2,286 to 2,591 meters)
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Morset and similar soils: 50 percent
Youga and similar soils: 30 percent
Minor components: 20 percent

Component Descriptions

Morset soils

Landform: Convex and planar slopes on plateaus
Parent material: Alluvium derived from sandstone
Slope: 3 to 12 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 9.2 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium

Calcium carbonate maximum: About 50 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 1 (slightly sodic)
Ecological site: Mountain Loam
Potential native vegetation: Letterman's needlegrass, slender wheatgrass, mountain big sagebrush, elk sedge, mountain brome, mountain snowberry, nodding brome, prairie Junegrass
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 7 inches; sandy loam
7 to 20 inches; sandy clay loam
20 to 60 inches; loam

Youga soils

Landform: Concave and planar slopes on plateaus
Parent material: Alluvium and residuum derived from sandstone
Slope: 3 to 12 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 8.7 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam
Potential native vegetation: Letterman's needlegrass, slender wheatgrass, mountain big sagebrush, elk sedge, mountain brome, mountain snowberry, nodding brome, prairie Junegrass
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 12 inches; fine sandy loam
12 to 24 inches; sandy clay loam
24 to 40 inches; fine sandy loam
40 to 60 inches; fine sandy loam

Minor Components

Adderton and similar soils
Composition: About 10 percent
Landform: Narrow drainageways

Dinnen and similar soils
Composition: About 10 percent
Landform: Convex slopes on plateaus

138—Moyerson-Rentsac complex, 15 to 45 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 6,800 feet (1,829 to 2,073 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Moyerson and similar soils: 50 percent
Rentsac and similar soils: 30 percent
Minor components: 20 percent

Component Descriptions

Moyerson soils

Landform: Hills
Parent material: Residuum derived from shale
Slope: 15 to 45 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 2.2 inches (very low)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 4 percent
Gypsum maximum: About 5 percent
Salinity maximum: About 8 mmhos/cm (slightly saline)
Sodium adsorption ratio maximum: About 3 (slightly sodic)
Ecological site: Clayey Slopes
Potential native vegetation: western wheatgrass, saline wildrye, bottlebrush squirreltail, shadscale saltbush, Indian ricegrass, Wyoming big sagebrush, prairie Junegrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 1 inch; silty clay loam

1 inch to 17 inches; silty clay
17 to 21 inches; weathered bedrock

Rentsac soils

Landform: Hills
Parent material: Residuum derived from sandstone
Slope: 15 to 45 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 0.7 inch (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Juniperus osteosperma-Pinus edulis/ Pleuraphis jamesii
Potential native vegetation:
Common trees: twoneedle pinyon, Utah juniper
Other plants: bluebunch wheatgrass, Wyoming big sagebrush, antelope bitterbrush, Indian ricegrass, bottlebrush squirreltail, needleandthread, prairie Junegrass, streambank wheatgrass, western wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 2 inches; channery sandy loam
2 to 10 inches; very channery sandy loam
10 to 14 inches; unweathered bedrock

Minor Components

Yamo and similar soils
Composition: About 10 percent

Kemmerer and similar soils
Composition: About 10 percent

139—Muggins gravelly sandy loam, 3 to 20 percent slopes

Map Unit Setting

Major Land Resource Area: 47
Elevation: 7,500 to 9,200 feet (2,286 to 2,804 meters)
Mean annual precipitation: 18 to 20 inches (457 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Muggins and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Muggins soils

Landform: Plateaus
Parent material: Residuum derived from sandstone and shale
Slope: 3 to 20 percent
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 8.1 inches (moderate)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Lodgepole Pine
Potential native vegetation:
Common trees: lodgepole pine
Other plants: elk sedge, grouse whortleberry, Fendler's meadowrue, blue wildrye, creeping juniper, heartleaf arnica, mountain snowberry
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 1 inch; moderately decomposed plant material
1 inch to 19 inches; gravelly sandy loam
19 to 23 inches; clay loam
23 to 51 inches; clay
51 to 60 inches; clay loam

Minor Components

Irigul and similar soils
Composition: About 5 percent
Landform: Convex slopes on plateaus

Coldspring and similar soils
Composition: About 5 percent
Landform: Convex and planar slopes on plateaus

Light colored soils with more than 35 percent rock fragments and similar soils
Composition: About 5 percent

140—Ninot-Crago-Garlips complex, 15 to 45 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,800 to 8,100 feet (2,073 to 2,469 meters)
Mean annual precipitation: 13 to 14 inches (330 to 356 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Ninot and similar soils: 50 percent
Crago and similar soils: 20 percent
Garlips and similar soils: 15 percent
Minor components: 15 percent

Component Descriptions

Ninot soils

Landform: Hills
Position on landform: Footslope
Parent material: Colluvium derived from sandstone and basal conglomerate
Slope: 15 to 45 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 7.0 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 55 percent
Gypsum maximum: None
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 1 (slightly sodic)
Ecological site: Dry Mountain Loam
Potential native vegetation: mountain big sagebrush, streambank wheatgrass, Letterman's needlegrass, Nevada bluegrass, needleandthread, prairie Junegrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 3 inches; very gravelly loam
3 to 7 inches; gravelly loam
7 to 32 inches; gravelly loam
32 to 60 inches; gravelly loam

Crago soils

Landform: Hills
Position on landform: Summit
Parent material: Residuum derived from basal conglomerate
Slope: 15 to 45 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 4.2 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 60 percent
Gypsum maximum: None
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Dry Exposure
Potential native vegetation: bluebunch wheatgrass, black sagebrush, needleandthread, prairie Junegrass, western wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 4 inches; very cobbly loam
4 to 33 inches; extremely gravelly sandy clay loam
33 to 60 inches; extremely gravelly sandy clay loam

Garlips soils

Landform: Drainageways on hills
Parent material: Colluvium derived from sandstone and basal conglomerate
Slope: 15 to 45 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 8.9 inches (moderate)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Very high
Calcium carbonate maximum: About 35 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 1 (slightly sodic)
Ecological site: Mountain Loam
Potential native vegetation: Letterman's needlegrass, mountain big sagebrush, slender wheatgrass, elk sedge, mountain brome, mountain snowberry, nodding brome, prairie Junegrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 8 inches; loam
8 to 21 inches; clay loam
21 to 60 inches; clay loam

Minor Components

Kemmerer and similar soils
Composition: About 8 percent
Landform: Hills
Position on landform: Backslope
Emlin and similar soils
Composition: About 7 percent
Landform: Hills
Position on landform: Footslope

141—Nortez, cool-Morapos complex, 3 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 6,400 to 7,600 feet (1,951 to 2,316 meters)
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Freeze-free period: 65 to 85 days

Map Unit Composition

Nortez and similar soils: 50 percent
Morapos and similar soils: 40 percent
Minor components: 10 percent

Component Descriptions

Nortez soils

Landform: Plateaus
Parent material: Residuum derived from interbedded sandstone and shale
Slope: 3 to 12 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 5.1 inches (low)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 1 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam
Potential native vegetation: slender wheatgrass, Letterman's needlegrass, mountain big sagebrush, mountain brome, mountain snowberry
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 5 inches; loam
5 to 10 inches; clay loam
10 to 26 inches; clay loam
26 to 30 inches; channery clay loam
30 to 34 inches; unweathered bedrock

Morapos soils

Landform: Plateaus
Parent material: Residuum derived form shale
Slope: 3 to 12 percent
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 9.1 inches (high)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 3 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 2 (slightly sodic)
Ecological site: Mountain Loam
Potential native vegetation: Letterman's needlegrass, mountain big sagebrush, mountain snowberry, slender wheatgrass, Saskatoon serviceberry, prairie Junegrass, western wheatgrass
Land capability subclass (irrigated): 4e
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 10 inches; loam
10 to 28 inches; clay loam
28 to 60 inches; clay loam

Minor Components

Rock outcrop
Composition: About 4 percent

Maudlin and similar soils
Composition: About 3 percent

Duffymont and similar soils
Composition: About 2 percent

Iles and similar soils
Composition: About 1 percent

142—Nortez, cool-Morapos complex, 12 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 6,400 to 7,600 feet (1,951 to 2,316 meters)
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Freeze-free period: 65 to 85 days

Map Unit Composition

Nortez and similar soils: 50 percent
Morapos and similar soils: 40 percent
Minor components: 10 percent

Component Descriptions

Nortez soils

Landform: Mountainsides
Parent material: Residuum derived from interbedded sandstone and shale
Slope: 12 to 25 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 5.1 inches (low)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 1 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam
Potential native vegetation: slender wheatgrass, Letterman's needlegrass, mountain big sagebrush, mountain brome, mountain snowberry
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 5 inches; loam
5 to 10 inches; clay loam
10 to 26 inches; clay loam
26 to 30 inches; channery clay loam
30 to 34 inches; unweathered bedrock

Morapos soils

Landform: Mountainsides
Parent material: Residuum derived form shale
Slope: 12 to 25 percent
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 9.1 inches (high)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 3 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 2 (slightly sodic)
Ecological site: Mountain Loam
Potential native vegetation: Letterman's needlegrass, mountain big sagebrush, mountain snowberry, slender wheatgrass, Saskatoon serviceberry, prairie Junegrass, western wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 10 inches; loam
10 to 28 inches; clay loam
28 to 60 inches; clay loam

Minor Components

Rock outcrop
Composition: About 4 percent

Maudlin and similar soils
Composition: About 3 percent

Duffymont and similar soils
Composition: About 2 percent

Cochetopa and similar soils
Composition: About 1 percent

143—Nunemaker clay loam, 3 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,300 to 6,800 feet (1,920 to 2,073 meters)
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Nunemaker and similar soils: 90 percent
Minor components: 10 percent

Figure 14.—A slumped area in map unit 49, Cryoborolls, slumped, 15 to 50 percent slopes. The combination of high clay percentage, low bearing strength, wet soils, and steep slopes often results in slumps. Here a stand of aspen has been destroyed by a recent slump.

Figure 15.—An area of map unit 107, Ironsprings-Maysprings-Gretdivid complex, 10 to 20 percent slopes. The valuable surface layer is being lost to wind erosion.

Figure 16.—Map unit 175, Sandwash-Langspring-Baston complex, 1 to 6 percent slopes provides suitable habitat for sage grouse.

Figure 17.—Typical landscape of the drier northwestern corner of Moffat County. Map unit 186, Talamantes loam, 0 to 6 percent slopes is in the foreground. This map unit provides winter forage for sheep because in normal years the snow cover is not deep enough to restrict their movement. Map unit 198, Torriorthents-Rock outcrop, shale complex, 30 to 75 percent slopes is in the background.

Figure 18.—An area of map unit 149, Pinelli loam, 3 to 12 percent slopes being used for dryland wheat production. Conservation tillage and the use of strips help to reduce erosion.

Figure 19.—A low spot in an area of map unit 209, Weed sandy loam, 1 to 12 percent slopes provides forage for livestock.

Component Descriptions

Nunemaker soils

Landform: Hills
Position on landform: Footslope, toeslope
Parent material: Alluvium derived from shale
Slope: 3 to 12 percent
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 8.4 inches (moderate)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 5 percent
Gypsum maximum: About 5 percent
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 15 (moderately sodic)
Ecological site: Claypan
Potential native vegetation: alkali sagebrush, western wheatgrass, bluebunch wheatgrass, prairie Junegrass
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 1 inch; clay loam
1 inch to 26 inches; clay
26 to 40 inches; clay
40 to 45 inches; clay loam
45 to 60 inches; gravelly sandy clay loam

Minor Components

Dark colored soils with clay subsoils and similar soils
Composition: About 3 percent

Yamo and similar soils
Composition: About 3 percent

Forelle and similar soils
Composition: About 2 percent

Shallow sandy soils over sandstone bedrock and similar soils
Composition: About 2 percent
Landform: Hills
Position on landform: Footslope
Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)

144—Pagoda loam, 12 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 6,400 to 7,200 feet (1,951 to 2,195 meters)
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Freeze-free period: 65 to 85 days

Map Unit Composition

Pagoda and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Pagoda soils

Landform: Hillslopes
Parent material: Residuum derived from shale
Slope: 12 to 25 percent
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 10.6 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Very high
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Deep Clay Loam
Potential native vegetation: western wheatgrass, Letterman's needlegrass, mountain big sagebrush, muttongrass, slender wheatgrass, mountain snowberry, prairie Junegrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 9 inches; loam
9 to 17 inches; clay loam
17 to 25 inches; clay
25 to 60 inches; clay

Minor Components

Hesperus and similar soils
Composition: About 8 percent

Morapos and similar soils
Composition: About 7 percent

145—Pagoda clay loam, 1 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 6,400 to 7,200 feet (1,951 to 2,195 meters)
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Freeze-free period: 65 to 85 days

Map Unit Composition

Pagoda and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Pagoda soils

Landform: Hillslopes, alluvial fans
Parent material: Alluvium and residuum derived from shale
Slope: 1 to 12 percent
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 10.8 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Very high
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Deep Clay Loam
Potential native vegetation: western wheatgrass, Letterman's needlegrass, mountain big sagebrush, muttongrass, slender wheatgrass, mountain snowberry, prairie Junegrass
Land capability subclass (irrigated): 4e
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 9 inches; clay loam
9 to 17 inches; clay loam
17 to 25 inches; clay
25 to 60 inches; clay

Minor Components

Hesperus and similar soils
Composition: About 8 percent

Morapos and similar soils
Composition: About 7 percent

146—Pavillion-Degater complex, 3 to 20 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,700 to 6,200 feet (1,737 to 1,890 meters)
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Freeze-free period: 90 to 105 days

Map Unit Composition

Pavillion and similar soils: 60 percent
Degater and similar soils: 25 percent
Minor components: 15 percent

Component Descriptions

Pavillion soils

Landform: Hills
Position on landform: Backslope, footslope
Parent material: Colluvium and residuum derived from shale
Slope: 3 to 20 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 7.1 inches (moderate)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: High
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Semidesert Loam
Potential native vegetation: Wyoming big sagebrush, bottlebrush squirreltail, shadscale saltbush, western wheatgrass, Sandberg bluegrass, saline wildrye, saltbush
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; loam
3 to 36 inches; clay loam
36 to 40 inches; weathered bedrock

Degater soils

Landform: Hills
Position on landform: Backslope
Parent material: Colluvium and residuum derived from shale
Slope: 3 to 20 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 4.1 inches (low)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 15 percent
Gypsum maximum: About 2 percent
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Clayey Slopes
Potential native vegetation: western wheatgrass, saline wildrye, shadscale saltbush, Gardner's saltbush, Wyoming big sagebrush, bottlebrush squirreltail
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; very gravelly silty clay
3 to 22 inches; clay
22 to 30 inches; clay
30 to 34 inches; weathered bedrock

Minor Components

Chipeta and similar soils
Composition: About 5 percent
Landform: Breaks

Massadona and similar soils
Composition: About 5 percent
Landform: Hills
Position on landform: Toeslope

Avalon and similar soils
Composition: About 5 percent
Landform: Benches

147—Peeler stony fine sandy loam, 5 to 25 percent slopes, very stony

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 8,000 to 9,000 feet (2,438 to 2,743 meters)
Mean annual precipitation: 20 to 22 inches (508 to 559 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Peeler and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Peeler soils

Landform: Alluvial fans, mountainsides
Parent material: Alluvium and residuum derived from sandstone and basalt
Slope: 5 to 25 percent
Surface fragments: About 2 percent stones
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 7.7 inches (moderate)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Medium
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Subalpine Fir
Potential native vegetation:
Common trees: Engelmann's spruce, subalpine fir
Other plants: grouse whortleberry, elk sedge, thimbleberry, heartleaf arnica
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 1 inch; slightly decomposed plant material
1 inch to 18 inches; stony fine sandy loam
18 to 45 inches; sandy clay loam
45 to 60 inches; gravelly sandy clay loam

Minor Components

Soils with dark surfaces 4 to 8 inches thick under aspen and similar soils
Composition: About 8 percent

Skeletal soils with extremely stony surfaces and similar soils
Composition: About 7 percent

148—Pilotpeak-Grubrob complex, 1 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 7,500 to 8,000 feet (2,286 to 2,438 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days
Note: In the vicinity of Godiva Rim, this map unit consists of 70 percent Pilotpeak soils and 20 percent Sandwash soils.

Map Unit Composition

Pilotpeak and similar soils: 45 percent
Grubrob and similar soils: 35 percent
Minor components: 20 percent

Component Descriptions

Pilotpeak soils

Landform: Convex slopes on plateaus
Parent material: Residuum derived from interbedded conglomerate and sandstone
Slope: 3 to 12 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 1.0 inch (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 35 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Shallow Slopes
Potential native vegetation: western wheatgrass, streambank wheatgrass, bluebunch wheatgrass, bottlebrush squirreltail, black sagebrush, needleandthread, prairie Junegrass, winterfat
Land capability subclass (nonirrigated): 6s

Typical Profile:
0 to 2 inches; gravelly sandy loam
2 to 6 inches; very gravelly sandy loam
6 to 17 inches; extremely gravelly sandy loam
17 to 21 inches; unweathered bedrock

Grubrob soils

Landform: Concave and planar slopes on plateaus
Parent material: Eolian deposits over interbedded conglomerate, sandstone, and limestone
Slope: 1 to 6 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 3.5 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 30 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Shallow Slopes
Potential native vegetation: western wheatgrass, streambank wheatgrass, bottlebrush squirreltail, black sagebrush, bluebunch wheatgrass, needleandthread, prairie Junegrass, winterfat
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 3 inches; fine sandy loam
3 to 18 inches; sandy clay loam
18 to 28 inches; very gravelly fine sandy loam
28 to 32 inches; unweathered bedrock

Minor Components

Moderately deep soils with very cobbly subsoils and similar soils
Composition: About 10 percent
Landform: Wider convex slopes on plateaus
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)

Loamy shallow soils and similar soils
Composition: About 10 percent
Landform: Concave slopes on plateaus
Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)

149—Pinelli loam, 3 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,200 to 7,000 feet (1,890 to 2,134 meters)

Mean annual precipitation: 12 to 14 inches (305 to 356 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Pinelli and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Pinelli soils

Landform: Benches, alluvial fans
Parent material: Alluvium derived from shale and in loess
Slope: 3 to 12 percent
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 9.4 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Very high
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Clayey Foothills
Potential native vegetation: western wheatgrass, Wyoming big sagebrush, bottlebrush squirreltail, prairie Junegrass
Land capability subclass (irrigated): 4e
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 6 inches; loam
6 to 18 inches; clay loam
18 to 60 inches; clay loam

Minor Components

Forelle soils on slightly steeper areas and similar soils
Composition: About 5 percent

Evanot soils on north slopes and similar soils
Composition: About 5 percent

Soils deep to shale bedrock and similar soils
Composition: About 5 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)

150—Pinelli clay loam, 3 to 15 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,200 to 7,400 feet (1,890 to 2,256 meters)
Mean annual precipitation: 12 to 14 inches (305 to 356 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Pinelli and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Pinelli soils

Landform: Hills
Position on landform: Toeslope, footslope
Parent material: Residuum derived from shale
Slope: 3 to 15 percent
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 9.4 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Very high
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Claypan
Potential native vegetation: alkali sagebrush, western wheatgrass, Wyoming big sagebrush, bluebunch wheatgrass, bottlebrush squirreltail, prairie Junegrass
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 4 inches; clay loam
4 to 21 inches; clay
21 to 60 inches; sandy clay loam

Minor Components

Kemmerer and similar soils
Composition: About 5 percent

Yamo and similar soils
Composition: About 5 percent

Tisworth and similar soils
Composition: About 5 percent

151—Pinelli loam, dry, 3 to 8 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,300 to 6,900 feet (1,920 to 2,103 meters)
Mean annual precipitation: 10 to 12 inches (254 to 305 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Pinelli and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Pinelli soils

Landform: Hills
Position on landform: Toeslope, footslope
Parent material: Alluvium derived from shale
Slope: 3 to 8 percent
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 9.4 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Very high
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Clayey Foothills
Potential native vegetation: western wheatgrass, Wyoming big sagebrush, bottlebrush squirreltail, prairie Junegrass
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 7 inches; loam
7 to 20 inches; sandy clay
20 to 60 inches; clay loam

Minor Components

Milren and similar soils
Composition: About 5 percent
Landform: Hills
Position on landform: Footslope

Forelle and similar soils
Composition: About 5 percent
Landform: Swales

Soils with sandy loam and loamy sand layers below 30 inches and similar soils
Composition: About 5 percent

152—Pinridge loam, 1 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,400 to 7,200 feet (1,951 to 2,195 meters)
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Pinridge and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Pinridge soils

Landform: Alluvial fans, stream terraces
Parent material: Alluvium derived from sedimentary rock
Slope: 1 to 12 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 9.4 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Flooding hazard: Rare
Runoff class: Medium
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Foothill Swale
Potential native vegetation: basin wildrye, basin big sagebrush, western wheatgrass, Indian ricegrass, rubber rabbitbrush
Land capability subclass (nonirrigated): 4c

Typical Profile:
0 to 5 inches; loam
5 to 20 inches; sandy clay loam
20 to 41 inches; sandy clay loam
41 to 60 inches; sandy loam

Minor Components

Lander and similar soils
Composition: About 5 percent

Battlement and similar soils
Composition: About 5 percent

153—Pricecreek clay loam, 0 to 4 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,800 to 6,300 feet (1,768 to 1,920 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Pricecreek and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Pricecreek soils

Landform: Terraces, hills
Position on landform: Toeslope
Parent material: Alluvium derived from shale
Slope: 0 to 4 percent
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 7.7 inches (moderate)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 16 (moderately sodic)
Ecological site: Clayey Foothills
Potential native vegetation: western wheatgrass, Wyoming big sagebrush, bluebunch wheatgrass, bottlebrush squirreltail, muttongrass
Land capability subclass (nonirrigated): 6s

Typical Profile:
0 to 4 inches; clay loam
4 to 21 inches; clay loam
21 to 35 inches; clay loam
35 to 60 inches; clay loam

Minor Components

Obadia and similar soils
Composition: About 5 percent
Landform: Near channels of streams
Slope: 0 to 1 percent

Tisworth and similar soils
Composition: About 5 percent
Landform: Near channels of streams
Slope: 0 to 1 percent

Pinelli and similar soils
Composition: About 5 percent
Landform: Hills, terraces
Position on landform: Toeslope

154—Quealman sand, 0 to 3 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 7,000 feet (1,829 to 2,134 meters)
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Quealman and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Quealman soils

Landform: Low terraces, flood plains
Parent material: Alluvium derived from mixed sources
Slope: 0 to 3 percent
Drainage class: Well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 6.6 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Flooding hazard: Occasional
Runoff class: Very low
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandy Swale

Potential native vegetation: basin wildrye, western wheatgrass, basin big sagebrush, inland saltgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; sand
3 to 40 inches; stratified loamy sand to fine sandy loam
40 to 60 inches; stratified loamy sand to fine sandy loam

Minor Components

Medium textured soils and similar soils
Composition: About 5 percent
Landform: Adjacent to escarpments of terraces

Soils with loamy sand and sand substrata and similar soils
Composition: About 5 percent
Landform: Adjacent to banks of streams

155—Rencot-Duffymont complex, 1 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 47
Elevation: 7,000 to 8,500 feet (2,134 to 2,591 meters)
Mean annual precipitation: 13 to 17 inches (330 to 432 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days
Note: The Rencot soil is on windswept positions with black sagebrush and the Duffymont soil is on wind deposition positions with mountain big sagebrush.

Map Unit Composition

Rencot and similar soils: 50 percent
Duffymont and similar soils: 30 percent
Minor components: 20 percent

Component Descriptions

Rencot soils

Landform: Plateaus
Parent material: Residuum derived from limestone
Slope: 1 to 25 percent
Depth to restrictive feature: 7 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 0.8 inch (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 40 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Dry Exposure
Potential native vegetation: bluebunch wheatgrass, black sagebrush, prairie Junegrass, Indian ricegrass, Sandberg bluegrass, bottlebrush squirreltail, needleandthread, western wheatgrass
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 2 inches; extremely channery loam
2 to 13 inches; extremely channery loam
13 to 17 inches; unweathered bedrock

Duffymont soils

Landform: Plateaus
Parent material: Residuum derived from sandstone
Slope: 1 to 25 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 0.6 inch (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Stony Loam
Potential native vegetation: bluebunch wheatgrass, Letterman's needlegrass, antelope bitterbrush, mountain big sagebrush, Indian ricegrass, Saskatoon serviceberry, muttongrass, needleandthread, western wheatgrass
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 2 inches; extremely flaggy fine sandy loam
2 to 12 inches; extremely flaggy fine sandy loam
12 to 16 inches; unweathered bedrock

Minor Components

Moderately deep soils and similar soils
Composition: About 7 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)

Maudlin and similar soils
Composition: About 7 percent

Rock outcrop
Composition: About 6 percent

156—Rentsac channery sandy loam, 25 to 65 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,800 to 7,000 feet (1,768 to 2,134 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Rentsac and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Rentsac soils

Landform: Hills
Parent material: Residuum derived from sandstone
Slope: 25 to 65 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 0.8 inch (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Juniperus osteosperma-Pinus edulis/ Pleuraphis jamesii
Potential native vegetation:
Common trees: twoneedle pinyon, Utah juniper
Other plants: bluebunch wheatgrass, Wyoming big sagebrush, antelope bitterbrush, Indian ricegrass, bottlebrush squirreltail, needleandthread, prairie Junegrass, streambank wheatgrass, western wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 3 inches; channery sandy loam
3 to 10 inches; very channery sandy loam
10 to 14 inches; unweathered bedrock

Minor Components

Rock outcrop
Composition: About 8 percent
Landform: Small cliffs

Rencot and similar soils
Composition: About 7 percent

157—Rentsac-Moyerson complex, 25 to 65 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 6,800 feet (1,829 to 2,073 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Rentsac and similar soils: 40 percent
Moyerson and similar soils: 35 percent
Minor components: 25 percent

Component Descriptions

Rentsac soils

Landform: Hills
Parent material: Residuum derived from sandstone
Slope: 25 to 65 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 0.7 inch (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None

Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Juniperus osteosperma-Pinus edulis/ Pleuraphis jamesii
Potential native vegetation:
Common trees: twoneedle pinyon, Utah juniper
Other plants: bluebunch wheatgrass, Wyoming big sagebrush, antelope bitterbrush, Indian ricegrass, bottlebrush squirreltail, needleandthread, prairie Junegrass, streambank wheatgrass, western wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 2 inches; very channery sandy loam
2 to 10 inches; very channery sandy loam
10 to 14 inches; unweathered bedrock

Moyerson soils

Landform: Hills
Parent material: Residuum derived from shale
Slope: 25 to 65 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 2.2 inches (very low)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 4 percent
Gypsum maximum: About 5 percent
Salinity maximum: About 8 mmhos/cm (slightly saline)
Sodium adsorption ratio maximum: About 3 (slightly sodic)
Ecological site: Juniperus osteosperma-Pinus edulis/ Pleuraphis jamesii
Potential native vegetation:
Common trees: Utah juniper, twoneedle pinyon
Other plants: western wheatgrass, bluebunch wheatgrass, Indian ricegrass, Wyoming big sagebrush, bottlebrush squirreltail, prairie Junegrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 1 inch; channery silty clay loam
1 inch to 17 inches; clay
17 to 21 inches; weathered bedrock

Minor Components

Rock outcrop
Composition: About 5 percent

Kemmerer and similar soils
Composition: About 4 percent

Yamo and similar soils
Composition: About 4 percent

Moderately deep loamy textured soils and similar soils
Composition: About 4 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)

Moderately deep coarse textured soils and similar soils
Composition: About 4 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)

Small areas with very stony surfaces and similar soils
Composition: About 4 percent

158—Rock outcrop-Earsman complex, 10 to 45 percent slopes

Map Unit Setting

Major Land Resource Area: 47
Elevation: 5,500 to 8,000 feet (1,676 to 2,438 meters)
Mean annual precipitation: 11 to 16 inches (279 to 406 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Rock outcrop: 70 percent
Earsman and similar soils: 20 percent
Minor components: 10 percent

Component Descriptions

Rock outcrop

Description: Rock outcrop consists mainly of vertical, with some horizontal, exposures of hard sandstone and quartzite bedrock.
Landform: Escarpments
Slope: 75 to 100 percent

Depth to restrictive feature: 0 inches to bedrock (lithic)
Available water capacity: About 0.0 inches (very low)
Runoff class: Very high
Salinity maximum: About 0 mmhos/cm (nonsaline)
Land capability subclass (nonirrigated): 8

Earsman soils

Landform: Mountainsides
Parent material: Residuum and colluvium derived sandstone and quartzite
Slope: 10 to 45 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 0.7 inch (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Foothill Juniper
Potential native vegetation:
Common trees: Utah juniper, twoneedle pinyon
Other plants: Wyoming big sagebrush, bluebunch wheatgrass, Indian ricegrass, antelope bitterbrush, bottlebrush squirreltail, needleandthread, true mountain mahogany
Land capability subclass (nonirrigated): 8

Typical Profile:
0 to 2 inches; extremely stony loamy sand
2 to 12 inches; very stony sandy loam, extremely stony sandy loam
12 to 16 inches; unweathered bedrock

Minor Components

Moderately deep soils and similar soils
Composition: About 4 percent
Landform: Mountainsides
Position on landform: Footslope
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)

Deep soils and similar soils
Composition: About 4 percent
Landform: Mountainsides
Position on landform: Footslope

Higher elevation soils with dark reddish gray surfaces and similar soils
Composition: About 2 percent

159—Rock outcrop-Haploborolls complex, 10 to 40 percent slopes

Map Unit Setting

Major Land Resource Area: 47
Elevation: 6,800 to 8,000 feet (2,073 to 2,438 meters)
Mean annual precipitation: 15 to 18 inches (381 to 457 millimeters)
Mean annual air temperature: 40 to 45 degrees F. (4.4 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Rock outcrop: 50 percent
Haploborolls and similar soils: 35 percent
Minor components: 15 percent

Component Descriptions

Rock outcrop

Description: Rock outcrop is exposed, massive, coarse grained sandstone bedrock which occurs on moderately sloping to moderately steep convex slopes.
Landform: Mountainsides
Slope: 10 to 100 percent
Depth to restrictive feature: 0 inches to bedrock (lithic)
Available water capacity: About 0.0 inches (very low)
Runoff class: Very high
Salinity maximum: About 0 mmhos/cm (nonsaline)
Land capability subclass (nonirrigated): 8

Haploborolls soils

Landform: Plateaus, hillslopes
Parent material: Colluvium and residuum derived from sandstone
Slope: 10 to 40 percent
Depth to restrictive feature: 4 to 30 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 2.6 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: None
Gypsum maximum: None

Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Potential native vegetation: bluegrass, brome, mountainmahogany, needlegrass, sagebrush, wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 8 inches; gravelly sandy loam
8 to 24 inches; very cobbly sandy loam
24 to 28 inches; unweathered bedrock

Minor Components

Steeper areas and similar soils
Composition: About 5 percent
Slope: 40 to 60 percent

Deep soils and similar soils
Composition: About 5 percent
Slope: 0 to 10 percent

Shallow soils near Rock outcrop
Composition: About 5 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)

160—Rock outcrop-Torriorthents complex, 50 to 75 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,900 to 8,000 feet (1,798 to 2,438 meters)
Mean annual precipitation: 9 to 16 inches (229 to 406 millimeters)
Mean annual air temperature: 42 to 48 degrees F. (5.6 to 8.9 degrees C.)
Freeze-free period: 75 to 105 days

Map Unit Composition

Rock outcrop: 70 percent
Torriorthents and similar soils: 25 percent
Minor components: 5 percent

Component Descriptions

Rock outcrop

Landform: Hills, cliffs
Position on landform: Backslope
Slope: 75 to 100 percent
Depth to restrictive feature: 0 inches to bedrock (lithic)
Available water capacity: About 0.0 inches (very low)
Runoff class: Very high
Salinity maximum: About 0 mmhos/cm (nonsaline)
Land capability subclass (nonirrigated): 8

Torriorthents soils

Landform: Mountainsides, hillslopes
Position on landform: Backslope
Parent material: Colluvium and residuum derived from sandstone and shale
Slope: 50 to 75 percent
Depth to restrictive feature: 4 to 30 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 1.5 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Potential native vegetation: Wyoming big sagebrush, Indian ricegrass, bottlebrush squirreltail, saltbush, needleandthread, shadscale, bud sagebrush, western wheatgrass
Land capability subclass (nonirrigated): 8

Typical Profile:
0 to 2 inches; channery sandy loam
2 to 14 inches; very channery sandy loam
14 to 18 inches; unweathered bedrock

Minor Components

Deep soils and similar soils
Composition: About 5 percent
Landform: Hillslopes
Position on landform: Footslope

161—Rock River sandy loam, 0 to 3 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 7,300 feet (1,829 to 2,225 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Rock River and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Rock River soils

Landform: Alluvial fans, benches
Parent material: Eolian deposits and in alluvium derived from sandstone
Slope: 0 to 3 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 7.5 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Rolling Loam
Potential native vegetation: Wyoming big sagebrush, needleandthread, Indian ricegrass, western wheatgrass, Nevada bluegrass, bottlebrush squirreltail, prairie Junegrass
Land capability subclass (irrigated): 4c
Land capability subclass (nonirrigated): 4c

Typical Profile:
0 to 3 inches; sandy loam
3 to 22 inches; sandy clay loam
22 to 32 inches; sandy clay loam
32 to 60 inches; sandy loam

Minor Components

Forelle and similar soils
Composition: About 8 percent

Ryan Park and similar soils
Composition: About 7 percent

162—Rock River sandy loam, 3 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,200 to 7,200 feet (1,890 to 2,195 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Rock River and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Rock River soils

Landform: Alluvial fans, benches, hillslopes
Parent material: Eolian deposits and residuum derived from sandstone
Slope: 3 to 12 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 7.5 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Rolling Loam
Potential native vegetation: Wyoming big sagebrush, needleandthread, Indian ricegrass, western wheatgrass, Nevada bluegrass, bottlebrush squirreltail, prairie Junegrass
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 3 inches; sandy loam
3 to 22 inches; sandy clay loam
22 to 32 inches; sandy clay loam
32 to 60 inches; sandy loam

Minor Components

Forelle and similar soils
Composition: About 8 percent

Berlake and similar soils
Composition: About 7 percent

163—Rock River sandy loam, 12 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 34

Elevation: 6,200 to 7,300 feet (1,890 to 2,225 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Rock River and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Rock River soils

Landform: Hillslopes
Parent material: Residuum derived from sandstone
Slope: 12 to 25 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 7.5 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Rolling Loam
Potential native vegetation: Wyoming big sagebrush, needleandthread, Indian ricegrass, western wheatgrass, Nevada bluegrass, bottlebrush squirreltail, prairie Junegrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; sandy loam
3 to 22 inches; sandy clay loam
22 to 32 inches; sandy clay loam
32 to 60 inches; sandy loam

Minor Components

Forelle and similar soils
Composition: About 8 percent

Berlake and similar soils
Composition: About 7 percent

164—Rock River-Taffom complex, 3 to 20 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,500 to 6,800 feet (1,981 to 2,073 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Rock River and similar soils: 50 percent
Taffom and similar soils: 25 percent
Minor components: 25 percent

Component Descriptions

Rock River soils

Landform: Convex positions on plateaus
Parent material: Residuum derived from sandstone
Slope: 3 to 20 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 8.1 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Shallow Slopes
Potential native vegetation: streambank wheatgrass, western wheatgrass, bluebunch wheatgrass, black sagebrush, bottlebrush squirreltail, muttongrass, needleandthread, prairie Junegrass, winterfat
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 2 inches; loamy sand
2 to 21 inches; sandy clay loam
21 to 48 inches; sandy loam
48 to 60 inches; sandy loam

Taffom soils

Landform: Concave positions on plateaus
Parent material: Eolian deposits and residuum derived from sandstone
Slope: 3 to 20 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 8.0 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)

Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Rolling Loam
Potential native vegetation: Wyoming big sagebrush, needleandthread, western wheatgrass, prairie Junegrass, Indian ricegrass, Nevada bluegrass, bluebunch wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 8 inches; sandy loam
8 to 41 inches; sandy clay loam
41 to 50 inches; sandy loam
50 to 60 inches; loamy sand

Minor Components

Berlake and similar soils
Composition: About 13 percent
Landform: Swales
Areas with stony surfaces and similar soils
Composition: About 12 percent
Landform: Small areas on knolls

165—Rogrube complex, 3 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,700 to 7,200 feet (2,042 to 2,195 meters)
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Rogrube and similar soils: 50 percent
Rogrube and similar soils: 25 percent
Minor components: 25 percent

Component Descriptions

Rogrube soils

Landform: Concave slopes and wind sheltered positions on dissected plateaus
Parent material: Residuum derived from gypsiferous shale
Slope: 3 to 12 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 9.8 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 35 percent
Gypsum maximum: About 15 percent
Salinity maximum: About 8 mmhos/cm (slightly saline)
Sodium adsorption ratio maximum: About 8 (slightly sodic)
Ecological site: Loamy 7-10" PPT
Potential native vegetation: Wyoming big sagebrush, streambank wheatgrass, Indian ricegrass, bottlebrush squirreltail, needleandthread, shadscale saltbush, western wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 3 inches; sandy loam
3 to 28 inches; clay loam
28 to 60 inches; clay loam

Rogrube soils

Landform: Convex windswept positions on dissected plateaus
Slope: 3 to 12 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 10.0 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 35 percent
Gypsum maximum: About 15 percent
Salinity maximum: About 8 mmhos/cm (slightly saline)
Sodium adsorption ratio maximum: About 8 (slightly sodic)
Ecological site: Clayey 9-11" P.Z.
Potential native vegetation: streambank wheatgrass, western wheatgrass, streambank wheatgrass, bottlebrush squirreltail
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; clay loam
3 to 28 inches; clay loam
28 to 60 inches; clay loam

Minor Components

Boltus and similar soils
Composition: About 7 percent
Landform: Moderately and strongly sloping convex slopes on dissected plateaus

Beamton and similar soils
Composition: About 6 percent
Landform: Moderately and strongly sloping convex slopes on dissected plateaus

Leswill and similar soils
Composition: About 6 percent
Landform: Nearly level to gently sloping concave slopes on dissected plateaus

Deep loamy soils with less than 15 percent calcium carbonate and similar soils
Composition: About 6 percent
Landform: Dissected plateaus

166—Routt loam, 3 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 7,000 to 8,000 feet (2,134 to 2,438 meters)
Mean annual precipitation: 18 to 20 inches (457 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Routt and similar soils: 80 percent
Minor components: 20 percent

Component Descriptions

Routt soils

Landform: Mountainsides, plateaus
Parent material: Loess and residuum derived from shale
Slope: 3 to 25 percent
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 10.3 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: High
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Brushy Loam
Potential native vegetation: Gambel's oak, Saskatoon serviceberry, mountain brome, Letterman's needlegrass, elk sedge, mountain snowberry, nodding brome, slender wheatgrass
Land capability subclass (nonirrigated): 6e
Typical Profile:
0 to 2 inches; slightly decomposed plant material
2 to 27 inches; loam
27 to 33 inches; clay loam
33 to 60 inches; clay

Minor Components

Foidel and similar soils
Composition: About 5 percent

Clayburn and similar soils
Composition: About 5 percent

Binco and similar soils
Composition: About 5 percent

Cochetopa and similar soils
Composition: About 5 percent

167—Routt-Cochetopa-Binco complex, 10 to 30 percent slopes, extremely stony

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 7,200 to 8,200 feet (2,195 to 2,499 meters)
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Routt and similar soils: 30 percent
Cochetopa and similar soils: 25 percent
Binco and similar soils: 20 percent
Minor components: 25 percent

Component Descriptions

Routt soils

Landform: Hills
Position on landform: Backslope
Parent material: Loess and residuum derived from shale
Slope: 10 to 30 percent, eastern to northern aspects
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 10.7 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: High
Calcium carbonate maximum: None
Gypsum maximum: None

Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Brushy Loam
Potential native vegetation: Gambel's oak, Saskatoon serviceberry, mountain brome, Letterman's needlegrass, elk sedge, mountain snowberry, nodding brome, slender wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 24 inches; loam
24 to 35 inches; clay loam
35 to 60 inches; clay loam

Cochetopa soils

Landform: Hills
Position on landform: Footslope, backslope
Parent material: Loess and residuum derived from shale
Slope: 10 to 30 percent, southern to northeastern aspects
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 11.1 inches (high)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: High
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam
Potential native vegetation: slender wheatgrass, Letterman's needlegrass, mountain big sagebrush, elk sedge, mountain brome, mountain snowberry, nodding brome
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 5 inches; loam
5 to 21 inches; clay loam
21 to 30 inches; clay
30 to 60 inches; clay

Binco soils

Landform: Hills
Position on landform: Backslope, shoulder
Parent material: Residuum derived from shale
Slope: 10 to 30 percent, eastern to western aspects
Surface fragments: About 6 percent stones
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 9.8 inches (high)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 5 percent
Gypsum maximum: About 2 percent
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Deep Clay Loam
Potential native vegetation: western wheatgrass, Letterman's needlegrass, mountain big sagebrush, mountain snowberry, slender wheatgrass, mountain brome
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 4 inches; cobbly clay loam
4 to 35 inches; clay
35 to 60 inches; clay loam

Minor Components

Foidel and similar soils
Composition: About 9 percent

Soils with extremely acid to strongly acid subsoils and similar soils
Composition: About 8 percent

Soils with seasonal water tables less than 60 inches deep and similar soils
Composition: About 8 percent
Landform: On or near recent landslides

168—Ruedloff sandy loam, 1 to 8 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 6,300 feet (1,829 to 1,920 meters)
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Ruedloff and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Ruedloff soils

Landform: Benches, hills

Position on landform: Toeslope
Parent material: Eolian deposits and in alluvium derived from sandstone
Slope: 1 to 8 percent
Drainage class: Somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 4.2 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandy
Potential native vegetation: Wyoming big sagebrush, needleandthread, Indian ricegrass, Nevada bluegrass, Sandberg bluegrass, plains pricklypear
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 4 inches; sandy loam
4 to 20 inches; sandy loam
20 to 60 inches; loamy coarse sand

Minor Components

Tresano and similar soils
Composition: About 5 percent
Landform: Hills, benches
Position on landform: Toeslope

Gravelly surfaced soils on sloping to moderately steep break and similar soils
Composition: About 5 percent
Landform: Sloping to moderately steep breaks

Kandaly and similar soils
Composition: About 5 percent
Landform: Low dunes

169—Ruedloff-Dunul complex, 5 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,200 to 6,500 feet (1,890 to 1,981 meters)
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Ruedloff and similar soils: 60 percent
Dunul and similar soils: 30 percent
Minor components: 10 percent

Component Descriptions

Ruedloff soils

Landform: Hills
Position on landform: Toeslope, backslope
Parent material: Residuum derived from sandstone
Slope: 5 to 25 percent
Drainage class: Somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 4.3 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandy
Potential native vegetation: needleandthread, Indian ricegrass, Wyoming big sagebrush, Nevada bluegrass, Sandberg bluegrass, plains pricklypear, saltbush, shadscale saltbush, winterfat
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 2 inches; loamy coarse sand
2 to 24 inches; coarse sandy loam
24 to 60 inches; coarse sand

Dunul soils

Landform: Hills
Position on landform: Backslope, summit
Parent material: Relict fluvial gravel deposits
Slope: 5 to 25 percent
Drainage class: Excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Available water capacity: About 2.4 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very low
Calcium carbonate maximum: About 15 percent

Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Dry Sandy
Potential native vegetation: needleandthread, Indian ricegrass, black sagebrush, streambank wheatgrass, threadleaf sedge, Nevada bluegrass, saltbush, winterfat
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; very gravelly loamy coarse sand
3 to 20 inches; very gravelly loamy coarse sand
20 to 31 inches; extremely gravelly loamy coarse sand
31 to 60 inches; gravelly loamy coarse sand

Minor Components

Tresano and similar soils
Composition: About 5 percent
Landform: Hills
Position on landform: Footslope

Hiatha and similar soils
Composition: About 5 percent
Landform: Hills
Position on landform: Backslope

170—Ryan Park loamy sand, 3 to 15 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,800 to 6,800 feet (1,768 to 2,073 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Ryan Park and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Ryan Park soils

Landform: Alluvial fans, hills
Position on landform: Toeslope
Parent material: Alluvium and residuum derived from sandstone
Slope: 3 to 15 percent
Drainage class: Somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 6.1 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 2 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 1 (slightly sodic)
Ecological site: Sandy Foothills
Potential native vegetation: Wyoming big sagebrush, needleandthread, Indian ricegrass, western wheatgrass, antelope bitterbrush, bottlebrush squirreltail, prairie Junegrass
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 5 inches; loamy sand
5 to 23 inches; sandy loam
23 to 30 inches; sandy loam
30 to 60 inches; loamy sand

Minor Components

Maybell and similar soils
Composition: About 5 percent

Grieves and similar soils
Composition: About 5 percent

Rock River and similar soils
Composition: About 5 percent

171—Ryan Park sandy loam, 0 to 3 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,800 to 6,800 feet (1,768 to 2,073 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Ryan Park and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Ryan Park soils

Landform: Alluvial fans, benches

Parent material: Eolian deposits and in alluvium derived from sandstone
Slope: 0 to 3 percent
Drainage class: Somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 5.8 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very low
Calcium carbonate maximum: About 2 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 1 (slightly sodic)
Ecological site: Sandy Foothills
Potential native vegetation: Wyoming big sagebrush, needleandthread, Indian ricegrass, western wheatgrass, antelope bitterbrush, bottlebrush squirreltail, prairie Junegrass
Land capability subclass (irrigated): 4c
Land capability subclass (nonirrigated): 4c

Typical Profile:
0 to 5 inches; sandy loam
5 to 23 inches; sandy loam
23 to 30 inches; sandy loam
30 to 39 inches; loamy sand
39 to 60 inches; sand

Minor Components

Rock River and similar soils
Composition: About 5 percent

Grieves and similar soils
Composition: About 5 percent

Maysprings and similar soils
Composition: About 5 percent

172—Ryan Park-Coyet complex, 5 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 7,000 feet (1,829 to 2,134 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Ryan Park and similar soils: 50 percent
Coyet and similar soils: 30 percent
Minor components: 20 percent

Component Descriptions

Ryan Park soils

Landform: Alluvial fans, hills
Parent material: Residuum derived from sandstone
Slope: 5 to 25 percent
Drainage class: Somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 6.1 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 2 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 1 (slightly sodic)
Ecological site: Sandy Foothills
Potential native vegetation: Wyoming big sagebrush, needleandthread, Indian ricegrass, western wheatgrass, antelope bitterbrush, bottlebrush squirreltail, prairie Junegrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 5 inches; loamy sand
5 to 30 inches; sandy loam
30 to 60 inches; loamy sand

Coyet soils

Landform: Alluvial fans, hills
Parent material: Eolian deposits and in residuum derived from sandstone
Slope: 5 to 25 percent
Drainage class: Excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 5.2 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 3 (slightly sodic)
Ecological site: Sandhills

Potential native vegetation: antelope bitterbrush, needleandthread, silver sagebrush, Indian ricegrass, Wyoming big sagebrush, galleta, prairie Junegrass, sand dropseed, prairie sagewort
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 6 inches; loamy sand
6 to 22 inches; loamy sand
22 to 60 inches; loamy sand

Minor Components

Maybell and similar soils
Composition: About 5 percent

Ironsprings and similar soils
Composition: About 5 percent
Gracot and similar soils
Composition: About 5 percent

Ryark and similar soils
Composition: About 5 percent

173—Ryark-Powderwash complex, 2 to 15 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,100 to 6,800 feet (1,859 to 2,073 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Ryark and similar soils: 65 percent
Powderwash and similar soils: 20 percent
Minor components: 15 percent

Component Descriptions

Ryark soils

Landform: Benches, hillslopes
Parent material: Eolian deposits and in residuum derived from sandstone
Slope: 2 to 15 percent
Drainage class: Somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 4.3 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Rolling Loam
Potential native vegetation: Wyoming big sagebrush, needleandthread, streambank wheatgrass, western wheatgrass, Indian ricegrass, bluebunch wheatgrass, bottlebrush squirreltail, prairie Junegrass
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 6 inches; loamy sand
6 to 19 inches; sandy loam
19 to 30 inches; loamy sand
30 to 60 inches; sand

Powderwash soils

Landform: Benches, hillslopes
Parent material: Eolian deposits over residuum derived from sandstone and shale
Slope: 2 to 15 percent
Depth to restrictive feature: 30 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 5.3 inches (low)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: High
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 1 (slightly sodic)
Ecological site: Rolling Loam
Potential native vegetation: Wyoming big sagebrush, needleandthread, prairie Junegrass, streambank wheatgrass, western wheatgrass, Indian ricegrass, bottlebrush squirreltail
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 3 inches; loamy sand
3 to 15 inches; sandy loam
15 to 22 inches; coarse sandy loam
22 to 38 inches; clay
38 to 42 inches; weathered bedrock

Minor Components

Maysprings and similar soils
Composition: About 5 percent
Landform: Benches, hillslopes

Styers and similar soils
Composition: About 5 percent
Landform: Benches, hillslopes

Gretivid and similar soils
Composition: About 5 percent
Landform: Low hills

174—Ryark-Maybell complex, 1 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,100 to 6,700 feet (1,859 to 2,042 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Ryark and similar soils: 70 percent
Maybell and similar soils: 15 percent
Minor components: 15 percent

Component Descriptions

Ryark soils

Landform: Concave and planar areas on plateaus
Parent material: Eolian deposits derived from sandstone
Slope: 1 to 12 percent
Drainage class: Somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 4.3 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Rolling Loam
Potential native vegetation: Wyoming big sagebrush, needleandthread, streambank wheatgrass, western wheatgrass, Indian ricegrass, bluebunch wheatgrass, bottlebrush squirreltail, prairie Junegrass
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 6 inches; loamy sand
6 to 19 inches; sandy loam
19 to 30 inches; loamy sand
30 to 60 inches; sand

Maybell soils

Landform: Dunes on plateaus
Parent material: Eolian deposits derived from sandstone
Slope: 1 to 12 percent
Drainage class: Excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Available water capacity: About 4.9 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very low
Calcium carbonate maximum: About 2 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandhills
Potential native vegetation: antelope bitterbrush, silver sagebrush, Indian ricegrass, needleandthread, Wyoming big sagebrush, rabbitbrush, sand dropseed, western wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; sand
3 to 20 inches; sand
20 to 60 inches; sand

Minor Components

Powderwash and similar soils
Composition: About 5 percent
Landform: Concave and planar areas on plateaus

Ryan Park and similar soils
Composition: About 5 percent
Landform: Concave and planar areas on plateaus

Gretivid and similar soils
Composition: About 5 percent
Landform: Convex areas on plateaus

175—Sandwash-Langspring-Baston complex, 1 to 6 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 7,300 feet (1,829 to 2,225 meters)
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Sandwash and similar soils: 40 percent
Langspring and similar soils: 30 percent
Baston and similar soils: 20 percent
Minor components: 10 percent

Component Descriptions

Sandwash soils

Landform: Planar areas on plateaus
Parent material: Loess and residuum derived from limestone
Slope: 1 to 6 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 2.8 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 70 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 2 (slightly sodic)
Ecological site: Loamy 7-10" PPT
Potential native vegetation: Wyoming big sagebrush, bottlebrush squirreltail, shadscale saltbush, streambank wheatgrass, streambank wheatgrass, Indian ricegrass, Nevada bluegrass, bluebunch wheatgrass, needleandthread, western wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 2 inches; loam
2 to 16 inches; loam
16 to 22 inches; extremely cobbly loam
22 to 26 inches; unweathered bedrock

Langspring soils

Landform: Planar areas on plateaus
Parent material: Loess over residuum derived from sandstone and siltstone
Slope: 1 to 6 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 8.8 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 40 percent
Gypsum maximum: About 2 percent
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Loamy 7-10" PPT
Potential native vegetation: Wyoming big sagebrush, streambank wheatgrass, Indian ricegrass, bottlebrush squirreltail, shadscale saltbush, streambank wheatgrass, needleandthread, western wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; sandy loam
3 to 42 inches; sandy clay loam
42 to 60 inches; sandy loam

Baston soils

Landform: Convex slopes on plateaus
Parent material: Residuum derived from shale
Slope: 1 to 6 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 3.3 inches (low)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 10 percent
Gypsum maximum: About 10 percent
Salinity maximum: About 16 mmhos/cm (moderately saline)
Sodium adsorption ratio maximum: About 30 (strongly sodic)
Ecological site: Shale
Potential native vegetation: Gardner's saltbush, bottlebrush squirreltail, western wheatgrass, Indian ricegrass, Nevada bluegrass, bud

sagebrush, shadscale saltbush, streambank wheatgrass, streambank wheatgrass
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 1 inch; sandy loam
1 inch to 28 inches; silty clay
28 to 32 inches; weathered bedrock

Minor Components

Kandaly and similar soils
Composition: About 10 percent

176—Schooner-Rock outcrop complex, 5 to 45 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,800 to 6,600 feet (1,768 to 2,012 meters)
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Freeze-free period: 90 to 105 days

Map Unit Composition

Schooner and similar soils: 50 percent
Rock outcrop: 35 percent
Minor components: 15 percent

Component Descriptions

Schooner soils

Landform: Plateaus, hillslopes
Parent material: Residuum derived from sandstone
Slope: 5 to 45 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)
Drainage class: Excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Available water capacity: About 0.9 inch (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandy Juniper
Potential native vegetation:
Common trees: twoneedle pinyon, Utah juniper
Other plants: Indian ricegrass, bluebunch wheatgrass, antelope bitterbrush, big sagebrush, bottlebrush squirreltail, needleandthread
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 4 inches; loamy sand
4 to 14 inches; loamy fine sand
14 to 18 inches; unweathered bedrock

Rock outcrop

Description: Rock outcrop consists of vertical and moderately sloping bare exposures of massive sandstone bedrock ranging in size from 0.1 to 3 acres.
Slope: 5 to 45 percent
Depth to restrictive feature: 0 inches to bedrock (lithic)
Available water capacity: About 0.0 inches (very low)
Runoff class: Very high
Salinity maximum: About 0 mmhos/cm (nonsaline)
Land capability subclass (nonirrigated): 8

Minor Components

Tricera and similar soils
Composition: About 8 percent

Moderately deep soils and similar soils
Composition: About 7 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)

177—Schooner-Tricera complex, 5 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,800 to 6,600 feet (1,768 to 2,012 meters)
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Freeze-free period: 90 to 105 days

Map Unit Composition

Schooner and similar soils: 55 percent
Tricera and similar soils: 25 percent
Minor components: 20 percent

Component Descriptions

Schooner soils

Landform: Hillslopes, ridges

Parent material: Residuum derived from sandstone
Slope: 5 to 25 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)
Drainage class: Excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Available water capacity: About 0.9 inch (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandy Juniper
Potential native vegetation:
Common trees: twoneedle pinyon, Utah juniper
Other plants: Indian ricegrass, bluebunch wheatgrass, antelope bitterbrush, big sagebrush, bottlebrush squirreltail, needleandthread
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 4 inches; loamy sand
4 to 14 inches; loamy fine sand
14 to 18 inches; unweathered bedrock

Tricera soils

Landform: Plateaus, hillslopes
Parent material: Eolian deposits and alluvium derived from sandstone
Slope: 5 to 15 percent
Drainage class: Excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 5.0 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Semidesert Sandy Loam
Potential native vegetation: needleandthread, Wyoming big sagebrush, Indian ricegrass, sand dropseed, bottlebrush squirreltail, streambank wheatgrass, wormwood
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 4 inches; loamy sand
4 to 47 inches; loamy fine sand
47 to 60 inches; fine sand

Minor Components

Rock outcrop
Composition: About 10 percent
Landform: Convex ridges

Moderately deep soils and similar soils
Composition: About 10 percent
Landform: Hillslopes, plateaus
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)

178—Simanni-Ruedloff complex, 1 to 10 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 6,500 feet (1,829 to 1,981 meters)
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Simanni and similar soils: 50 percent
Ruedloff and similar soils: 40 percent
Minor components: 10 percent

Component Descriptions

Simanni soils

Landform: Hills
Position on landform: Toeslope
Parent material: Alluvium derived from sandstone
Slope: 1 to 10 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 5.4 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandy
Potential native vegetation: needleandthread, Indian ricegrass, Wyoming big sagebrush, streambank wheatgrass, streambank wheatgrass, fourwing

saltbush, shadscale saltbush, spiny hopsage, threadleaf sedge
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 10 inches; coarse sandy loam
10 to 22 inches; sandy clay loam
22 to 33 inches; coarse sandy loam
33 to 60 inches; loamy coarse sand

Ruedloff soils

Landform: Hills
Position on landform: Toeslope
Parent material: Alluvium derived from sandstone
Slope: 1 to 10 percent
Drainage class: Somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 4.3 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandy 9-11" PPT
Potential native vegetation: needleandthread, Indian ricegrass, Wyoming big sagebrush, Nevada bluegrass, Sandberg bluegrass, plains pricklypear, saltbush, shadscale saltbush, winterfat
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 2 inches; loamy coarse sand
2 to 24 inches; coarse sandy loam
24 to 60 inches; loamy coarse sand

Minor Components

Kandaly and similar soils
Composition: About 5 percent
Landform: Hills
Position on landform: Toeslope

Tresano and similar soils
Composition: About 5 percent
Landform: Hills
Position on landform: Toeslope

179—Skyway fine sandy loam, dry, 15 to 75 percent slopes

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 7,000 to 8,500 feet (2,134 to 2,591 meters)
Mean annual precipitation: 18 to 20 inches (457 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Skyway and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Skyway soils

Landform: Mountainsides
Parent material: Residuum and colluvium derived from sandstone
Slope: 15 to 75 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 4.0 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 1 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Brushy Loam
Potential native vegetation: Gambel's oak, Saskatoon serviceberry, elk sedge, mountain brome, nodding brome, common chokecherry, mountain snowberry
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 20 inches; fine sandy loam

20 to 31 inches; gravelly sandy loam
31 to 35 inches; unweathered bedrock

Minor Components

Clayburn and similar soils
Composition: About 3 percent

Lamphier and similar soils
Composition: About 3 percent

Foidel and similar soils
Composition: About 3 percent

Winevada and similar soils
Composition: About 3 percent

Splitro and similar soils
Composition: About 3 percent

180—Spool-Maybell complex, 5 to 40 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,600 to 7,300 feet (2,012 to 2,225 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Spool and similar soils: 55 percent
Maybell and similar soils: 30 percent
Minor components: 15 percent

Component Descriptions

Spool soils

Landform: Hills, ridges
Position on landform: Backslope
Parent material: Residuum derived from sandstone
Slope: 5 to 40 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)
Drainage class: Excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 1.1 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandyland
Potential native vegetation: Wyoming big sagebrush, antelope bitterbrush, needleandthread, Indian ricegrass, western wheatgrass
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 4 inches; loamy fine sand
4 to 12 inches; loamy fine sand
12 to 16 inches; unweathered bedrock

Maybell soils

Landform: Hills
Position on landform: Toeslope, footslope
Parent material: Local alluvium and eolian deposits derived from sandstone
Slope: 5 to 15 percent
Drainage class: Excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Available water capacity: About 5.0 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very low
Calcium carbonate maximum: About 2 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandy Foothills
Potential native vegetation: needleandthread, Indian ricegrass, Wyoming big sagebrush, western wheatgrass, antelope bitterbrush, rabbitbrush, sand dropseed
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; loamy fine sand
3 to 32 inches; loamy fine sand
32 to 60 inches; sand

Minor Components

Shallow very channery soils and similar soils
Composition: About 5 percent
Landform: Convex slopes on hills
Position on landform: Footslope, toeslope
Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)

Rock outcrop
Composition: About 5 percent

Landform: Convex slopes on hills
Position on landform: Footslope, toeslope

Moderately deep soils and similar soils
Composition: About 5 percent
Landform: Concave slopes on hills
Position on landform: Toeslope, footslope
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)

181—Stunner sandy loam, 1 to 8 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,500 to 6,900 feet (1,981 to 2,103 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Stunner and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Stunner soils

Landform: Plateaus
Parent material: Eolian deposits
Slope: 1 to 8 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 5.8 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 40 percent
Gypsum maximum: None
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Rolling Loam
Potential native vegetation: Wyoming big sagebrush, western wheatgrass, Indian ricegrass, bluebunch wheatgrass, needleandthread, prairie Junegrass, streambank wheatgrass, streambank wheatgrass
Land capability subclass (nonirrigated): 4c

Typical Profile:
0 to 4 inches; sandy loam
4 to 15 inches; sandy clay loam
15 to 24 inches; sandy loam
24 to 43 inches; sandy loam
43 to 60 inches; loamy sand

Minor Components

Soils with a sandy loam upper subsoil and similar soils
Composition: About 5 percent

Rock River and similar soils
Composition: About 5 percent

182—Stunner, moist-Emlin complex, 1 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 47
Elevation: 6,600 to 7,800 feet (2,012 to 2,377 meters)
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Stunner and similar soils: 55 percent
Emlin and similar soils: 35 percent
Minor components: 10 percent

Component Descriptions

Stunner soils

Landform: Pediments
Parent material: Alluvium derived from limestone and sandstone, and in loess
Slope: 1 to 12 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 8.1 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 50 percent
Gypsum maximum: None
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 1 (slightly sodic)
Ecological site: Deep Loam
Potential native vegetation: Wyoming big sagebrush, needleandthread, prairie Junegrass, western wheatgrass, Indian ricegrass, Nevada

bluegrass, Saskatoon serviceberry, bluebunch wheatgrass, muttongrass
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 5 inches; loam
5 to 17 inches; clay loam
17 to 42 inches; loam
42 to 60 inches; sandy loam

Emlin soils

Landform: Pediments
Parent material: Alluvium derived from limestone and sandstone and in loess
Slope: 1 to 12 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 9.4 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 40 percent
Gypsum maximum: None
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 1 (slightly sodic)
Ecological site: Deep Loam
Potential native vegetation: needleandthread, western wheatgrass, mountain big sagebrush, muttongrass, prairie Junegrass, Nevada bluegrass, mountain snowberry, yellow rabbitbrush, basin wildrye
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 11 inches; loam
11 to 19 inches; clay loam
19 to 60 inches; silty clay loam

Minor Components

Soils similar to Emlin but without a clay loam subsoil and similar soils
Composition: About 4 percent

Forelle and similar soils
Composition: About 3 percent

Crago and similar soils
Composition: About 3 percent
Landform: Breaks adjacent to streams

183—Styers-Ironsprings-Maysprings complex, 10 to 20 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,200 to 7,300 feet (1,890 to 2,225 meters)
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Styers and similar soils: 45 percent
Ironsprings and similar soils: 25 percent
Maysprings and similar soils: 15 percent
Minor components: 15 percent

Component Descriptions

Styers soils

Landform: Hills
Position on landform: Backslope, summit, footslope
Parent material: Residuum derived from shale
Slope: 10 to 20 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 5.3 inches (low)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 3 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Claypan
Potential native vegetation: alkali sagebrush, western wheatgrass, bluebunch wheatgrass, prairie Junegrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 1 inch; clay
1 inch to 35 inches; clay
35 to 39 inches; weathered bedrock

Ironsprings soils

Landform: Hills
Position on landform: Footslope, backslope

Parent material: Colluvium and residuum derived from sandstone
Slope: 10 to 20 percent
Drainage class: Somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 4.8 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandyland
Potential native vegetation: antelope bitterbrush, Wyoming big sagebrush, needleandthread, Indian ricegrass, prairie Junegrass, western wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 14 inches; loamy coarse sand
14 to 40 inches; coarse sandy loam
40 to 60 inches; loamy coarse sand

Maysprings soils

Landform: Hills
Position on landform: Backslope, summit
Parent material: Residuum derived from sandstone
Slope: 10 to 20 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 4.7 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 2 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandyland
Potential native vegetation: antelope bitterbrush, Wyoming big sagebrush, needleandthread, Indian ricegrass, bluebunch wheatgrass, prairie Junegrass, western wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 7 inches; loamy coarse sand
7 to 22 inches; sandy clay loam
22 to 28 inches; coarse sandy loam
28 to 60 inches; coarse sand

Minor Components

Berlake and similar soils
Composition: About 8 percent
Landform: North and west facing hills
Position on landform: Backslope, footslope

Gretivid and similar soils
Composition: About 7 percent
Landform: Hills
Position on landform: Summit

184—Styers-Pinelli-Taffom complex, 10 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,200 to 7,300 feet (1,890 to 2,225 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Styers and similar soils: 40 percent
Pinelli and similar soils: 20 percent
Taffom and similar soils: 15 percent
Minor components: 25 percent

Component Descriptions

Styers soils

Landform: Hills
Parent material: Residuum derived from shale
Slope: 10 to 25 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 4.2 inches (low)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 3 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Claypan
Potential native vegetation: alkali sagebrush, western wheatgrass, bluebunch wheatgrass, prairie Junegrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 1 inch; silty clay loam
1 inch to 28 inches; clay
28 to 32 inches; weathered bedrock

Pinelli soils

Landform: Hills
Parent material: Loess
Slope: 10 to 25 percent
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 9.2 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Very high
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Clayey Foothills
Potential native vegetation: western wheatgrass, Wyoming big sagebrush, bottlebrush squirreltail, prairie Junegrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 8 inches; fine sandy loam
8 to 26 inches; clay
26 to 60 inches; clay loam

Taffom soils

Landform: Hills
Parent material: Colluvium and residuum derived from sandstone
Slope: 10 to 25 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 8.4 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Rolling Loam
Potential native vegetation: Wyoming big sagebrush, needleandthread, western wheatgrass, prairie Junegrass, Indian ricegrass, Nevada bluegrass, bluebunch wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 6 inches; sandy loam
6 to 43 inches; sandy clay loam
43 to 53 inches; loam
53 to 60 inches; loamy sand

Minor Components

Forelle and similar soils
Composition: About 5 percent

Gretivid and similar soils
Composition: About 3 percent
Landform: Hills
Position on landform: Summit

Maysprings and similar soils
Composition: About 2 percent
Landform: Hills
Position on landform: Summit

Deep soils and similar soils
Composition: About 5 percent
Landform: Hills
Position on landform: Footslope

Evanot and similar soils
Composition: About 5 percent

Morapos and similar soils
Composition: About 5 percent

185—Taffom sandy loam, 3 to 15 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,700 to 7,000 feet (2,042 to 2,134 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Taffom and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Taffom soils

Landform: Hillslopes, plateaus

Parent material: Eolian deposits and residuum derived from sandstone
Slope: 3 to 15 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 8.4 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Rolling Loam
Potential native vegetation: Wyoming big sagebrush, needleandthread, western wheatgrass, prairie Junegrass, Indian ricegrass, Nevada bluegrass, bluebunch wheatgrass
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 6 inches; sandy loam
6 to 43 inches; sandy clay loam
43 to 53 inches; loam
53 to 60 inches; loam

Minor Components

Maysprings and similar soils
Composition: About 5 percent
Landform: Convex slopes on plateaus

Rock River and similar soils
Composition: About 5 percent
Landform: Hillslopes, plateaus

Berlake and similar soils
Composition: About 5 percent
Landform: Near swales, drainageways

186—Talamantes loam, 0 to 6 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,200 to 7,200 feet (1,890 to 2,195 meters)
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Talamantes and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Talamantes soils

Landform: Hills, alluvial fans
Position on landform: Toeslope
Parent material: Alluvium derived from sedimentary rocks
Slope: 0 to 6 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 10.2 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 5 percent
Gypsum maximum: About 1 percent
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 4 (slightly sodic)
Ecological site: Silty Swale
Potential native vegetation: Wyoming big sagebrush, Gardner's saltbush, Indian ricegrass, streambank wheatgrass, streambank wheatgrass, western wheatgrass
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 3 inches; loam
3 to 48 inches; loam
48 to 60 inches; sandy loam

Minor Components

Coarse textured soils and similar soils
Composition: About 8 percent

Debone and similar soils
Composition: About 7 percent

187—Talamantes loam, 6 to 15 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,200 to 7,200 feet (1,890 to 2,195 meters)
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)

Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Talamantes and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Talamantes soils

Landform: Hills, alluvial fans
Position on landform: Footslope
Parent material: Alluvium derived from sedimentary rocks
Slope: 6 to 15 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 10.2 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 5 percent
Gypsum maximum: About 1 percent
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 4 (slightly sodic)
Ecological site: Loamy
Potential native vegetation: Wyoming big sagebrush, Indian ricegrass, needleandthread, streambank wheatgrass, shadscale saltbush, streambank wheatgrass, western wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; loam
3 to 48 inches; loam
48 to 60 inches; sandy loam

Minor Components

Coarse textured soils and similar soils
Composition: About 10 percent

188—Talamantes loam, saline, 0 to 8 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 7,200 feet (1,829 to 2,195 meters)
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Talamantes and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Talamantes soils

Landform: Alluvial fans, hills
Position on landform: Toeslope
Parent material: Alluvium derived from sedimentary rocks
Slope: 0 to 8 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 8.3 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 5 percent
Gypsum maximum: About 10 percent
Salinity maximum: About 16 mmhos/cm (moderately saline)
Sodium adsorption ratio maximum: About 8 (slightly sodic)
Ecological site: Alkali Upland
Potential native vegetation: Gardner's saltbush, streambank wheatgrass, streambank wheatgrass, western wheatgrass, Indian ricegrass
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 3 inches; loam
3 to 24 inches; clay loam
24 to 60 inches; loam

Minor Components

Clayey soils and similar soils
Composition: About 10 percent
Landform: Footslopes adjacent to steep breaks on hills

Quealman and similar soils
Composition: About 5 percent
Landform: Incised flood plains

189—Tipper-Crustown complex, 10 to 40 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,400 to 6,000 feet (1,646 to 1,829 meters)
Mean annual precipitation: 7 to 10 inches (178 to 254 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Freeze-free period: 90 to 105 days

Map Unit Composition

Tipper and similar soils: 55 percent
Crustown and similar soils: 35 percent
Minor components: 10 percent

Component Descriptions

Tipper soils

Landform: Hills
Position on landform: Toeslope, footslope, backslope
Parent material: Local alluvium and residuum derived from sandstone
Slope: 10 to 40 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Available water capacity: About 2.0 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Semidesert Juniper
Potential native vegetation:
Common trees: Utah juniper, twoneedle pinyon
Other plants: big sagebrush, needleandthread, Indian ricegrass, spiny hopsage
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 1 inch; loamy fine sand
1 inch to 28 inches; loamy sand, loamy fine sand
28 to 32 inches; weathered bedrock

Crustown soils

Landform: Hills
Position on landform: Shoulder, backslope
Parent material: Residuum derived from sandstone
Slope: 10 to 40 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)
Drainage class: Excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Available water capacity: About 0.8 inch (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Semidesert Juniper
Potential native vegetation:
Common trees: Utah juniper
Other plants: Utah juniper, Wyoming big sagebrush, needleandthread, Indian ricegrass, spiny hopsage
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 1 inch; loamy fine sand
1 inch to 10 inches; loamy fine sand
10 to 14 inches; weathered bedrock

Minor Components

Tipperary and similar soils
Composition: About 10 percent
Landform: Hills
Position on landform: Footslope, toeslope

190—Tipperary sand, 5 to 20 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,400 to 6,000 feet (1,646 to 1,829 meters)
Mean annual precipitation: 7 to 10 inches (178 to 254 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Freeze-free period: 90 to 105 days

Map Unit Composition

Tipperary and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Tipperary soils

Landform: Hillslopes
Parent material: Eolian deposits and alluvium derived from mixed sources
Slope: 5 to 20 percent
Drainage class: Excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Available water capacity: About 4.7 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very low
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandy Cold Desert
Potential native vegetation:
Common trees: twoneedle pinyon, Utah juniper
Other plants: Wyoming big sagebrush, needleandthread, spiny hopsage, Indian ricegrass, Nevada bluegrass, bottlebrush squirreltail, plains pricklypear
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; sand
3 to 60 inches; sand

Minor Components

Ecklund and similar soils
Composition: About 10 percent
Landform: Concave areas on hillslopes

191—Tipperary loamy fine sand, 3 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,400 to 6,000 feet (1,646 to 1,829 meters)
Mean annual precipitation: 7 to 10 inches (178 to 254 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Freeze-free period: 90 to 105 days

Map Unit Composition

Tipperary and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Tipperary soils

Landform: Hills, plateaus
Position on landform: Toeslope
Parent material: Eolian deposits and alluvium derived from sandstone
Slope: 3 to 12 percent
Drainage class: Excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Available water capacity: About 4.8 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very low
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandy Cold Desert
Potential native vegetation: needleandthread, spiny hopsage, Indian ricegrass, shadscale saltbush, Nevada bluegrass, Wyoming big sagebrush, bottlebrush squirreltail, plains pricklypear
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; loamy fine sand
3 to 60 inches; loamy fine sand

Minor Components

Ecklund and similar soils
Composition: About 5 percent
Landform: Convex slopes on plateaus

Soils with sandy loam subsoils and similar soils
Composition: About 5 percent
Landform: Planar slopes on plateaus

192—Tipperary-Willwood complex, 1 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,400 to 6,000 feet (1,646 to 1,829 meters)
Mean annual precipitation: 7 to 10 inches (178 to 254 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Freeze-free period: 90 to 105 days

Map Unit Composition

Tipperary and similar soils: 50 percent
Willwood and similar soils: 40 percent
Minor components: 10 percent

Component Descriptions

Tipperary soils

Landform: Hills, plateaus
Position on landform: Toeslope
Parent material: Eolian deposits and alluvium derived from sandstone
Slope: 1 to 12 percent
Drainage class: Excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Available water capacity: About 4.8 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very low
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Limy Cold Desert
Potential native vegetation: winterfat, Indian ricegrass, needleandthread, shadscale saltbush, streambank wheatgrass, Wyoming big sagebrush, bottlebrush squirreltail
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; loamy fine sand
3 to 60 inches; loamy fine sand

Willwood soils

Landform: Hills, fan terraces
Position on landform: Toeslope
Parent material: Alluvium derived from sandstone
Slope: 1 to 12 percent
Drainage class: Excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Available water capacity: About 2.8 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very low
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Limy Cold Desert
Potential native vegetation: winterfat, Indian ricegrass, bottlebrush squirreltail, needleandthread
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 16 inches; loamy fine sand
16 to 60 inches; extremely channery loamy fine sand

Minor Components

Tipperary and similar soils
Composition: About 5 percent
Landform: Fan terraces, hills
Position on landform: Toeslope

Chroder and similar soils
Composition: About 5 percent
Landform: Fan terraces, hills
Position on landform: Toeslope

193—Tisworth fine sandy loam, 0 to 9 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 7,000 feet (1,829 to 2,134 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Tisworth and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Tisworth soils

Landform: Alluvial fans, stream terraces
Parent material: Alluvium derived from mixed sources
Slope: 0 to 9 percent
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 5.2 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 15 percent
Gypsum maximum: About 2 percent
Salinity maximum: About 16 mmhos/cm (moderately saline)

Sodium adsorption ratio maximum: About 30 (strongly sodic)
Ecological site: Alkaline Slopes
Potential native vegetation: Wyoming big sagebrush, streambank wheatgrass, greasewood, Nevada bluegrass, bluebunch wheatgrass, muttongrass
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 3 inches; fine sandy loam
3 to 18 inches; clay loam
18 to 60 inches; stratified fine sandy loam to clay loam

Minor Components

Yamo and similar soils
Composition: About 8 percent

Ryan Park and similar soils
Composition: About 7 percent

194—Tolman-Duffymont complex, 10 to 30 percent slopes, extremely stony

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,600 to 7,300 feet (2,012 to 2,225 meters)
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Freeze-free period: 65 to 85 days

Map Unit Composition

Tolman and similar soils: 50 percent
Duffymont and similar soils: 35 percent
Minor components: 15 percent

Component Descriptions

Tolman soils

Landform: Plateaus, mountainsides
Parent material: Residuum derived from sandstone
Slope: 10 to 30 percent
Surface fragments: About 8 percent stones
Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 1.0 inch (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Loamy Breaks
Potential native vegetation: Wyoming big sagebrush, western wheatgrass, antelope bitterbrush, true mountain mahogany, Indian ricegrass, Nevada bluegrass, bluebunch wheatgrass, needleandthread
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 6 inches; very stony fine sandy loam
6 to 15 inches; extremely stony sandy clay loam
15 to 19 inches; unweathered bedrock

Duffymont soils

Landform: Plateaus, mountainsides
Parent material: Residuum derived from sandstone
Slope: 10 to 30 percent
Surface fragments: About 8 percent stones
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 0.6 inch (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Loamy Breaks
Potential native vegetation: mountain big sagebrush, western wheatgrass, antelope bitterbrush, true mountain mahogany, Indian ricegrass, Nevada bluegrass, Saskatoon serviceberry, bluebunch wheatgrass, needleandthread
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 4 inches; very stony fine sandy loam
4 to 11 inches; extremely stony fine sandy loam
11 to 15 inches; unweathered bedrock

Minor Components

Rock outcrop
Composition: About 5 percent

Nortez and similar soils
Composition: About 5 percent

Maudlin and similar soils
Composition: About 5 percent

195—Torriorthents, 12 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 7,000 feet (1,829 to 2,134 meters)
Mean annual precipitation: 9 to 12 inches (228 to 305 millimeters)
Mean annual air temperature: 42 to 48 degrees F. (5.6 to 8.9 degrees C.)
Freeze-free period: 75 to 105 days
Note: This unit is about 50 percent Torriorthents soils that are shallow over hard bedrock, 30 percent Torriorthents soils that are shallow over soft bedrock, and 15 percent Torriorthents soils that are moderately deep over soft or hard bedrock.

Map Unit Composition

Torriorthents and similar soils: 95 percent
Minor components: 5 percent

Component Descriptions

Torriorthents soils

Landform: Breaks
Parent material: Residuum derived from interbedded sandstone and shale
Slope: 12 to 25 percent
Depth to restrictive feature: 4 to 30 inches to bedrock (paralithic); 4 to 30 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 0.9 inch (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 10 percent
Gypsum maximum: About 5 percent
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 10 (slightly sodic)
Potential native vegetation: Wyoming big sagebrush, Indian ricegrass, bottlebrush squirreltail, saltbush, needleandthread, shadscale, bud sagebrush, western wheatgrass
Land capability subclass (nonirrigated): 7s
Typical Profile:
0 to 8 inches; stony loam
8 to 12 inches; weathered bedrock

Minor Components

Rock outcrop
Composition: About 3 percent

Badland
Composition: About 2 percent

196—Torriorthents-Baston complex, 3 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 7,000 feet (1,829 to 2,134 meters)
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Torriorthents and similar soils: 50 percent
Baston and similar soils: 35 percent
Minor components: 15 percent

Component Descriptions

Torriorthents soils

Landform: Hills
Position on landform: Backslope
Parent material: Residuum and colluvium derived from sandstone and shale
Slope: 3 to 12 percent
Depth to restrictive feature: 4 to 30 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 0.9 inch (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 10 percent
Gypsum maximum: About 5 percent
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 10 (slightly sodic)
Potential native vegetation: Wyoming big sagebrush, Indian ricegrass, bottlebrush squirreltail, saltbush,

needleandthread, shadscale, bud sagebrush, western wheatgrass
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 8 inches; stony loam
8 to 12 inches; weathered bedrock

Baston soils

Landform: Hills
Position on landform: Footslope
Parent material: Residuum derived from shale
Slope: 3 to 12 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 3.3 inches (low)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 10 percent
Gypsum maximum: About 10 percent
Salinity maximum: About 16 mmhos/cm (moderately saline)
Sodium adsorption ratio maximum: About 30 (strongly sodic)
Ecological site: Shale
Potential native vegetation: Gardner's saltbush, bottlebrush squirreltail, western wheatgrass, Indian ricegrass, Nevada bluegrass, thickspike wheatgrass, bud sagebrush, shadscale, streambank wheatgrass
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 1 inch; sandy loam
1 inch to 28 inches; silty clay
28 to 32 inches; weathered bedrock

Minor Components

Badland
Composition: About 5 percent
Sand dunes and similar soils
Composition: About 5 percent

Rock outcrop
Composition: About 5 percent

197—Torriorthents-Rock outcrop, sandstone complex, 25 to 75 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 11,280 feet (1,829 to 3,438 meters)
Mean annual precipitation: 9 to 16 inches (229 to 406 millimeters)
Mean annual air temperature: 42 to 48 degrees F. (5.6 to 8.9 degrees C.)
Freeze-free period: 75 to 105 days
Note: This unit is 40 percent very shallow to shallow Torriorthents on backslopes, 20 percent moderately deep Torriorthents on backslopes, and 30 percent rock outcrop.

Map Unit Composition

Torriorthents and similar soils: 60 percent
Rock outcrop: 30 percent
Minor components: 10 percent

Component Descriptions

Torriorthents soils

Landform: Hills, mountainsides
Position on landform: Backslope
Parent material: Residuum and colluvium derived from sandstone and shale
Slope: 25 to 75 percent
Depth to restrictive feature: 4 to 30 inches to bedrock (paralithic); 4 to 30 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 1.5 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Potential native vegetation: Indian ricegrass, Wyoming big sagebrush, bluebunch wheatgrass, western wheatgrass, antelope bitterbrush, needleandthread, true mountainmahogany
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 2 inches; channery sandy loam
2 to 14 inches; channery clay loam
14 to 18 inches; unweathered bedrock

Rock outcrop

Description: Rock outcrop is mainly vertical sandstone or limestone ledges and exposed soft shale.
Slope: 25 to 99 percent
Depth to restrictive feature: 0 inches to bedrock (lithic)
Available water capacity: About 0.0 inches (very low)
Runoff class: Very high
Salinity maximum: About 0 mmhos/cm (nonsaline)
Land capability subclass (nonirrigated): 8

Minor Components

Deep loamy soils and similar soils
Composition: About 10 percent
Landform: Hillslopes
Position on landform: Footslope

198—Torriorthents-Rock outcrop, shale complex, 30 to 75 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 7,200 feet (1,829 to 2,195 meters)
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 48 degrees F. (5.6 to 8.9 degrees C.)
Freeze-free period: 75 to 105 days

Map Unit Composition

Torriorthents and similar soils: 60 percent
Rock outcrop: 40 percent
Minor components:

Component Descriptions

Torriorthents soils

Landform: Breaks, hillslopes
Parent material: Residuum derived from shale
Slope: 30 to 50 percent
Depth to restrictive feature: 4 to 30 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 0.8 inch (very low)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Very high
Calcium carbonate maximum: About 10 percent
Gypsum maximum: About 10 percent
Salinity maximum: About 16 mmhos/cm (moderately saline)
Sodium adsorption ratio maximum: About 10 (slightly sodic)
Potential native vegetation: Wyoming big sagebrush, Indian ricegrass, bottlebrush squirreltail, saltbush, needleandthread, shadscale, bud sagebrush, western wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 8 inches; silty clay loam
8 to 12 inches; weathered bedrock

Rock outcrop

Description: Rock outcrop consists of areas with less than 4 inches of soil material over bedrock or exposed shale bedrock.
Slope: 50 to 75 percent
Depth to restrictive feature: 0 inches to bedrock (paralithic)
Available water capacity: About 0.0 inches (very low)
Runoff class: Very high
Salinity maximum: About 0 mmhos/cm (nonsaline)
Land capability subclass (nonirrigated): 8

199—Torriorthents-Torripsamments complex, 12 to 40 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 7,200 feet (1,829 to 2,194 meters)
Mean annual precipitation: 9 to 13 inches (229 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Torriorthents and similar soils: 60 percent
Torripsamments and similar soils: 30 percent
Minor components: 10 percent

Component Descriptions

Torriorthents soils

Landform: Hillslopes
Parent material: Residuum derived from sandstone and shale
Slope: 12 to 40 percent

Depth to restrictive feature: 4 to 30 inches to bedrock (paralithic); 4 to 30 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 2.1 inches (very low)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: High
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Potential native vegetation: Indian ricegrass, sagebrush, wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 2 inches; clay loam
2 to 15 inches; clay
15 to 19 inches; weathered bedrock

Torripsamments soils

Landform: Hillslopes
Position on landform: Footslope
Parent material: Eolian deposits and residuum derived from sandstone
Slope: 12 to 40 percent
Depth to restrictive feature: 20 to 80 inches to bedrock (lithic); 20 to 80 inches to bedrock (paralithic)
Drainage class: Excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Available water capacity: About 1.4 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 2 percent
Gypsum maximum: About 1 percent
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 1 (slightly sodic)
Potential native vegetation: Indian ricegrass, needleandthread, wheatgrass, sagebrush, threadleaf sedge, Nevada bluegrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 4 inches; sand
4 to 26 inches; loamy sand
26 to 30 inches; unweathered bedrock

Minor Components

Ruedloff and similar soils
Composition: About 4 percent

Rock River and similar soils
Composition: About 3 percent

Ryan Park and similar soils
Composition: About 3 percent

200—Tresano sandy loam, 3 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 7,000 feet (1,829 to 2,134 meters)
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Tresano and similar soils: 80 percent
Minor components: 20 percent

Component Descriptions

Tresano soils

Landform: Plateaus
Parent material: Eolian deposits derived from sandstone
Slope: 3 to 12 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 8.8 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Loamy 7-10" PPT
Potential native vegetation: Wyoming big sagebrush, shadscale saltbush, streambank wheatgrass, Indian ricegrass, Nevada bluegrass, needleandthread, streambank wheatgrass, western wheatgrass
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 8 inches; sandy loam
8 to 30 inches; sandy clay loam
30 to 60 inches; sandy loam

Minor Components

Simanni and similar soils
Composition: About 5 percent
Landform: Narrow convex breaks

Boltus and similar soils
Composition: About 5 percent
Landform: Narrow convex breaks

Kandaly and similar soils
Composition: About 5 percent
Landform: Near shoulders of breaks

Moderately deep soils over sandstone and similar soils
Composition: About 5 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)

201—Tresano-Hiatha-Kandaly association, 2 to 20 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 6,800 feet (1,829 to 2,073 meters)
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Tresano and similar soils: 35 percent
Hiatha and similar soils: 30 percent
Kandaly and similar soils: 15 percent
Minor components: 20 percent

Component Descriptions

Tresano soils

Landform: Alluvial fans, hills
Position on landform: Toeslope, footslope
Parent material: Alluvium derived from sandstone and shale
Slope: 2 to 12 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 9.1 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Clayey 9-11" P.Z.
Potential native vegetation: streambank wheatgrass, western wheatgrass, streambank wheatgrass, Indian ricegrass, Nevada bluegrass, Wyoming big sagebrush, needleandthread, shadscale saltbush
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 2 inches; loam
2 to 28 inches; clay loam
28 to 60 inches; loam

Hiatha soils

Landform: Hills
Position on landform: Summit, backslope
Parent material: Residuum derived from shale
Slope: 5 to 20 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 2.2 inches (very low)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 5 percent
Gypsum maximum: About 2 percent
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 7 (slightly sodic)
Ecological site: Alkali Upland
Potential native vegetation: Gardner's saltbush, Indian ricegrass, streambank wheatgrass, streambank wheatgrass, western wheatgrass, bottlebrush squirreltail
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 2 inches; silty clay
2 to 14 inches; silty clay
14 to 18 inches; weathered bedrock

Kandaly soils

Landform: Hills
Position on landform: Summit
Parent material: Eolian deposits derived from sandstone

Slope: 2 to 12 percent
Drainage class: Excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Available water capacity: About 3.6 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very low
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 10 (slightly sodic)
Ecological site: Dry Sandy
Potential native vegetation: needleandthread, Indian ricegrass, black sagebrush, streambank wheatgrass, threadleaf sedge, fourwing saltbush, winterfat
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; loamy sand
3 to 60 inches; loamy sand

Minor Components

Shallow sandy soils and similar soils
Composition: About 4 percent
Landform: Hillslopes, hills
Position on landform: Summit
Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)

Badlands and similar soils
Composition: About 4 percent
Landform: Steep hillslopes

Moderately deep sandy loamy soils and similar soils
Composition: About 4 percent
Landform: Hills, hillslopes
Position on landform: Footslope
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)

Ruedloff and similar soils
Composition: About 4 percent

Simanni and similar soils
Composition: About 4 percent

202—Turzo loam, 0 to 5 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,600 to 6,200 feet (1,707 to 1,890 meters)
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Freeze-free period: 90 to 105 days

Map Unit Composition

Turzo and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Turzo soils

Landform: Hills, alluvial fans
Position on landform: Toeslope
Parent material: Alluvium derived from sandstone and shale
Slope: 0 to 5 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 9.1 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 15 percent
Gypsum maximum: About 1 percent
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 3 (slightly sodic)
Ecological site: Clayey Saltdesert
Potential native vegetation: Gardner's saltbush, Indian ricegrass, bottlebrush squirreltail, galleta, western wheatgrass, bud sagebrush, saline wildrye, shadscale saltbush
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 4 inches; loam
4 to 23 inches; loam
23 to 60 inches; loam

Minor Components

Fine textured soils and similar soils
Composition: About 10 percent

203—Turzo loam, saline, 1 to 8 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,600 to 6,200 feet (1,707 to 1,890 meters)
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)

Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Freeze-free period: 90 to 105 days

Map Unit Composition

Turzo and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Turzo soils

Landform: Alluvial fans, hills
Position on landform: Toeslope
Parent material: Alluvium derived from sandstone and shale
Slope: 1 to 8 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 9.0 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 32 mmhos/cm (strongly saline)
Sodium adsorption ratio maximum: About 13 (moderately sodic)
Ecological site: Alkaline Slopes
Potential native vegetation: big sagebrush, bottlebrush squirreltail, galleta, greasewood, shadscale saltbush, Gardner's saltbush, bud sagebrush, western wheatgrass
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 3 inches; loam
3 to 18 inches; loam
18 to 34 inches; clay loam
34 to 60 inches; loam

Minor Components

Moderately coarse textured soils and similar soils
Composition: About 10 percent

204—Typic Natrargids, 0 to 5 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,300 to 6,000 feet (1,615 to 1,829 meters)
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 105 days

Map Unit Composition

Typic Natrargids and similar soils: 80 percent
Minor components: 20 percent

Component Descriptions

Typic Natrargids soils

Landform: Alluvial fans, stream terraces
Parent material: Alluvium derived from sandstone, siltstone, and shale
Slope: 0 to 5 percent
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 6.2 inches (moderate)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Very high
Calcium carbonate maximum: About 4 percent
Gypsum maximum: About 5 percent
Salinity maximum: About 16 mmhos/cm (moderately saline)
Sodium adsorption ratio maximum: About 35 (strongly sodic)
Potential native vegetation: Wyoming big sagebrush, black greasewood, galleta, Gardner's saltbush, bottlebrush squirreltail, bud sagebrush, inland saltgrass, shadscale, western wheatgrass
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 2 inches; fine sandy loam
2 to 18 inches; sandy clay loam
18 to 35 inches; sandy clay loam
35 to 60 inches; silty clay loam

Minor Components

Deaver and similar soils
Composition: About 5 percent

Turzo and similar soils
Composition: About 5 percent

Eghelm and similar soils
Composition: About 5 percent

Massadona and similar soils
Composition: About 5 percent

205—Uffens fine sandy loam, 0 to 3 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,700 to 6,000 feet (1,737 to 1,829 meters)
Mean annual precipitation: 9 to 11 inches (228 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 90 to 105 days

Map Unit Composition

Uffens and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Uffens soils

Landform: Alluvial fans, terraces
Parent material: Alluvium derived from mixed sources
Slope: 0 to 3 percent
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 5.7 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 4 percent
Gypsum maximum: None
Salinity maximum: About 8 mmhos/cm (slightly saline)
Sodium adsorption ratio maximum: About 25 (moderately sodic)
Ecological site: Alkaline Slopes
Potential native vegetation: Wyoming big sagebrush, greasewood, shadscale saltbush, winterfat, Indian ricegrass, bottlebrush squirreltail, bud sagebrush, galleta, western wheatgrass
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 4 inches; fine sandy loam
4 to 12 inches; clay loam
12 to 37 inches; stratified loamy fine sand to loam
37 to 60 inches; sand

Minor Components

Youngston and similar soils
Composition: About 10 percent

206—Ustorthents, frigid-Borolls complex, 25 to 75 percent slopes

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 7,000 to 8,500 feet (2,134 to 2,591 meters)
Mean annual precipitation: 16 to 20 inches (406 to 508 millimeters)
Mean annual air temperature: 37 to 45 degrees F. (2.8 to 7.2 degrees C.)
Freeze-free period: 50 to 85 days
Note: Included in this unit in the Williams Fork Mountains area are Abor soils on footslopes. Included in this unit in the Tanks Peak area are Rencot soils on back slopes.

Map Unit Composition

Ustorthents and similar soils: 55 percent
Borolls and similar soils: 35 percent
Minor components: 10 percent

Component Descriptions

Ustorthents soils

Landform: Mountainsides
Position on landform: Footslope, backslope
Parent material: Residuum and colluvium derived from sedimentary rocks
Slope: 25 to 75 percent, southern to western aspects
Depth to restrictive feature: 10 to 30 inches to bedrock (paralithic); 10 to 30 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 2.5 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Potential native vegetation: wheatgrass, Indian ricegrass, sagebrush, antelope bitterbrush,

bluegrass, needleandthread, serviceberry, true mountainmahogany
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 3 inches; very channery sandy loam
3 to 28 inches; extremely channery sandy loam
28 to 32 inches; unweathered bedrock

Borolls soils

Landform: Mountainsides
Position on landform: Backslope, footslope
Parent material: Residuum and colluvium derived from sedimentary rocks
Slope: 25 to 75 percent, eastern to northern aspects
Depth to restrictive feature: 20 to 80 inches to bedrock (paralithic); 20 to 80 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 4.5 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Potential native vegetation: Columbia needlegrass, Gambel's oak, Saskatoon serviceberry, elk sedge, letterman needlegrass, mountain big sagebrush, mountain brome, mountain snowberry, slender wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 19 inches; loam
19 to 30 inches; cobbly sandy clay loam
30 to 34 inches; unweathered bedrock

Minor Components

Abor and similar soils
Composition: About 5 percent
Landform: Mountainsides
Position on landform: Footslope

Rencot and similar soils
Composition: About 5 percent
Landform: Mountainsides
Position on landform: Backslope

207—Vermillion-Langspring complex, 3 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 6,800 feet (1,829 to 2,073 meters)
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Vermillion and similar soils: 40 percent
Langspring and similar soils: 35 percent
Minor components: 25 percent

Component Descriptions

Vermillion soils

Landform: Hillslopes, plateaus
Parent material: Residuum derived from sandstone and siltstone
Slope: 3 to 25 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 3.3 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 40 percent
Gypsum maximum: None
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 2 (slightly sodic)
Ecological site: Loamy 7-10" PPT
Potential native vegetation: Wyoming big sagebrush, streambank wheatgrass, streambank wheatgrass, Indian ricegrass, bottlebrush squirreltail, shadscale saltbush, Nevada bluegrass, needleandthread, western wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; loam
3 to 23 inches; channery loam
23 to 28 inches; extremely cobbly loam
28 to 32 inches; unweathered bedrock

Langspring soils

Landform: Hillslopes, plateaus
Parent material: Loess over residuum derived from sandstone and siltstone
Slope: 3 to 25 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 8.9 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 40 percent
Gypsum maximum: About 2 percent
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Loamy 7-10" PPT
Potential native vegetation: Wyoming big sagebrush, streambank wheatgrass, Indian ricegrass, bottlebrush squirreltail, shadscale saltbush, streambank wheatgrass, needleandthread, western wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; loam
3 to 17 inches; sandy clay loam
17 to 60 inches; sandy clay loam

Minor Components

Moderately deep soils over soft shale and similar soils
Composition: About 9 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)

Fenster and similar soils
Composition: About 8 percent

Deep gravelly soils and similar soils
Composition: About 8 percent

208—Wallson-Tricera complex, 3 to 15 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,700 to 6,100 feet (1,737 to 1,859 meters)
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Freeze-free period: 90 to 105 days

Map Unit Composition

Wallson and similar soils: 50 percent
Tricera and similar soils: 35 percent
Minor components: 15 percent

Component Descriptions

Wallson soils

Landform: Hills, hillslopes
Position on landform: Summit
Parent material: Eolian deposits derived from sandstone
Slope: 3 to 15 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 8.1 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Semidesert Sandy Loam
Potential native vegetation: needleandthread, Wyoming big sagebrush, Indian ricegrass, bottlebrush squirreltail, saline wildrye, sand dropseed, streambank wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; fine sandy loam
3 to 38 inches; fine sandy loam
38 to 48 inches; fine sandy loam
48 to 60 inches; sandy clay loam

Tricera soils

Landform: Leeward hills, hillslopes
Position on landform: Summit
Parent material: Eolian deposits derived from sandstone
Slope: 3 to 15 percent
Drainage class: Excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 5.1 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 5 percent

Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Semidesert Sandy Loam
Potential native vegetation: needleandthread, Wyoming big sagebrush, Indian ricegrass, sand dropseed, bottlebrush squirreltail, streambank wheatgrass, wormwood
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 4 inches; loamy fine sand
4 to 47 inches; loamy fine sand
47 to 60 inches; fine sand

Minor Components

Soils with thick sandy clay loam subsoils and similar soils
Composition: About 5 percent
Landform: Hillslopes

Schooner and similar soils
Composition: About 5 percent
Landform: Hills
Position on landform: Summit

Moderately deep soils over shale and similar soils
Composition: About 5 percent
Landform: Hills
Position on landform: Summit
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)

209—Weed sandy loam, 1 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,300 to 7,400 feet (1,920 to 2,256 meters)
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Weed and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Weed soils

Landform: Alluvial fans, hills
Position on landform: Toeslope
Parent material: Alluvium derived from sandstone
Slope: 1 to 12 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 7.8 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Deep Loam
Potential native vegetation: Wyoming big sagebrush, needleandthread, western wheatgrass, prairie Junegrass, Indian ricegrass, bottlebrush squirreltail, common snowberry, muttongrass
Land capability subclass (nonirrigated): 4c

Typical Profile:
0 to 10 inches; sandy loam
10 to 28 inches; sandy clay loam
28 to 41 inches; sandy clay loam
41 to 60 inches; sandy loam

Minor Components

Berlake and similar soils
Composition: About 5 percent

Ironsprings and similar soils
Composition: About 5 percent

Soils with sandy loam subsoil and similar soils
Composition: About 5 percent

210—Willwood-Sheppard, cool complex, 1 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,300 to 6,000 feet (1,615 to 1,829 meters)
Mean annual precipitation: 7 to 10 inches (178 to 254 millimeters)

Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Freeze-free period: 90 to 105 days

Map Unit Composition

Willwood and similar soils: 55 percent
Sheppard and similar soils: 35 percent
Minor components: 10 percent

Component Descriptions

Willwood soils

Landform: Alluvial fans
Parent material: Alluvium derived from sandstone and quartzite
Slope: 1 to 12 percent
Drainage class: Excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 1.6 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 2 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 1 (slightly sodic)
Ecological site: Sandy Cold Desert
Potential native vegetation: needleandthread, Indian ricegrass, shadscale saltbush, spiny hopsage, Wyoming big sagebrush, bottlebrush squirreltail, sand dropseed, Nevada bluegrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 8 inches; loamy sand
8 to 60 inches; extremely cobbly sand

Sheppard soils

Landform: Alluvial fans
Parent material: Alluvium derived from sandstone and quartzite
Slope: 1 to 12 percent
Drainage class: Excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 5.4 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Sandy Cold Desert
Potential native vegetation: needleandthread, Indian ricegrass, bottlebrush squirreltail, shadscale saltbush, Wyoming big sagebrush, sand dropseed, spiny hopsage
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 4 inches; loamy fine sand
4 to 60 inches; loamy fine sand

Minor Components

Soils with extremely cobbly subsoil and similar soils
Composition: About 10 percent
Landform: Alluvial fans

211—Willwood-Tipperary complex, 12 to 40 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,300 to 5,600 feet (1,615 to 1,707 meters)
Mean annual precipitation: 7 to 10 inches (178 to 254 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Freeze-free period: 90 to 105 days

Map Unit Composition

Willwood and similar soils: 55 percent
Tipperary and similar soils: 35 percent
Minor components: 10 percent

Component Descriptions

Willwood soils

Landform: Terrace escarpments
Parent material: Alluvium derived from mixed sources
Slope: 12 to 40 percent
Drainage class: Excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Available water capacity: About 1.5 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 2 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 1 (slightly sodic)

Ecological site: Cold Desert Breaks
Potential native vegetation: needleandthread, Wyoming big sagebrush, Indian ricegrass, bottlebrush squirreltail, shadscale saltbush
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 2 inches; very cobbly loamy fine sand
2 to 11 inches; very gravelly loamy fine sand
11 to 60 inches; extremely cobbly sand

Tipperary soils

Landform: Terrace escarpments
Parent material: Eolian deposits derived form mixed sources
Slope: 12 to 40 percent
Drainage class: Excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Available water capacity: About 4.8 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Cold Desert Breaks
Potential native vegetation: needleandthread, Wyoming big sagebrush, Indian ricegrass, bottlebrush squirreltail, shadscale saltbush, winterfat
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 3 inches; loamy fine sand
3 to 60 inches; loamy fine sand

Minor Components

Tipperary and similar soils
Composition: About 10 percent
Landform: Terrace escarpments

212—Willwood-Tipperary, cobbly substratum complex, 1 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,400 to 6,000 feet (1,646 to 1,829 meters)
Mean annual precipitation: 7 to 10 inches (178 to 254 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Freeze-free period: 90 to 105 days

Map Unit Composition

Willwood and similar soils: 60 percent
Tipperary and similar soils: 25 percent
Minor components: 15 percent

Component Descriptions

Willwood soils

Landform: Benches
Parent material: Alluvium derived from mixed sources
Slope: 1 to 12 percent
Drainage class: Excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 1.7 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 2 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 1 (slightly sodic)
Ecological site: Sandy Cold Desert
Potential native vegetation: needleandthread, Indian ricegrass, shadscale saltbush, spiny hopsage, Wyoming big sagebrush, bottlebrush squirreltail, sand dropseed, Nevada bluegrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 10 inches; loamy fine sand
10 to 60 inches; extremely cobbly sand

Tipperary soils

Landform: Benches
Parent material: Eolian deposits over alluvium derived from mixed sources
Slope: 1 to 12 percent
Drainage class: Excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 4.4 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 4 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 3 (slightly sodic)

Ecological site: Sandy Cold Desert
Potential native vegetation: needleandthread, Indian ricegrass, bottlebrush squirreltail, shadscale saltbush, Wyoming big sagebrush, sand dropseed, spiny hopsage
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 4 inches; loamy fine sand
4 to 36 inches; loamy fine sand
36 to 60 inches; extremely gravelly sand

Minor Components

Chroder and similar soils
Composition: About 8 percent
Landform: Benches

Tipperary and similar soils
Composition: About 7 percent
Landform: Benches

213—Winevada-Splitro complex, 3 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 7,000 to 8,500 feet (2,134 to 2,591 meters)
Mean annual precipitation: 18 to 20 inches (457 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Winevada and similar soils: 60 percent
Splitro and similar soils: 30 percent
Minor components: 10 percent

Component Descriptions

Winevada soils

Landform: Plateaus, mountainsides
Parent material: Residuum derived from sandstone
Slope: 3 to 25 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 4.5 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam
Potential native vegetation: Saskatoon serviceberry, mountain big sagebrush, mountain brome, nodding brome, slender wheatgrass, Letterman's needlegrass, elk sedge, mountain snowberry
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 10 inches; loam
10 to 25 inches; loam
25 to 29 inches; unweathered bedrock

Splitro soils

Landform: Plateaus, mountainsides
Parent material: Residuum derived from sandstone
Slope: 3 to 25 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 1.7 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam
Potential native vegetation: mountain big sagebrush, nodding brome, slender wheatgrass, elk sedge, mountain brome, mountain snowberry
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 1 inch; slightly decomposed plant material
1 inch to 12 inches; fine sandy loam
12 to 14 inches; fine sandy loam
14 to 17 inches; unweathered bedrock

Minor Components

Skyway and similar soils
Composition: About 3 percent
Foidel and similar soils
Composition: About 3 percent

Lamphier and similar soils
Composition: About 2 percent

Clayburn and similar soils
Composition: About 2 percent

214—Winevada-Splitro complex, 25 to 65 percent slopes

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 7,000 to 8,500 feet (2,134 to 2,591 meters)
Mean annual precipitation: 18 to 20 inches (457 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Winevada and similar soils: 60 percent
Splitro and similar soils: 30 percent
Minor components: 10 percent

Component Descriptions

Winevada soils

Landform: Plateaus, mountainsides
Parent material: Residuum derived from sandstone
Slope: 25 to 65 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 4.5 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Brushy Loam
Potential native vegetation: Gambel's oak, Saskatoon serviceberry, elk sedge, mountain brome, Letterman's needlegrass, mountain snowberry, nodding brome, slender wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 1 inch; slightly decomposed plant material
1 inch to 11 inches; loam
11 to 26 inches; loam
26 to 29 inches; unweathered bedrock

Splitro soils

Landform: Plateaus, mountainsides
Parent material: Residuum derived from sandstone
Slope: 25 to 65 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 1.7 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Brushy Loam
Potential native vegetation: Gambel's oak, Saskatoon serviceberry, elk sedge, mountain brome, mountain snowberry, nodding brome, slender wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 1 inch; slightly decomposed plant material
1 inch to 12 inches; fine sandy loam
12 to 14 inches; fine sandy loam
14 to 17 inches; unweathered bedrock

Minor Components

Skyway and similar soils
Composition: About 3 percent

Rock outcrop
Composition: About 3 percent

Lamphier and similar soils
Composition: About 2 percent

Foidel and similar soils
Composition: About 2 percent

215—Winkleman clay loam, 0 to 3 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,300 to 6,000 feet (1,615 to 1,829 meters)
Mean annual precipitation: 7 to 10 inches (178 to 254 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Freeze-free period: 90 to 105 days

Map Unit Composition

Winkleman and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Winkleman soils

Landform: Flood plains
Parent material: Alluvium derived from mixed sources
Slope: 0 to 3 percent
Drainage class: Moderately well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 10.6 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Flooding hazard: Rare
Seasonal high water table depth: About 30 to 48 inches
Runoff class: High
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Cold Desert Overflow
Potential native vegetation: basin wildrye, common reed, fourwing saltbush, alkali sacaton, western wheatgrass
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 6 inches; clay loam
6 to 60 inches; stratified loam to clay loam

Minor Components

Youngston soils on higher areas and similar soils
Composition: About 10 percent
Haplaquolls and similar soils
Composition: About 5 percent
Landform: Depressions

216—Yamo loam, 3 to 15 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,200 to 7,000 feet (1,890 to 2,134 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Yamo and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Yamo soils

Landform: Benches, hills
Position on landform: Toeslope
Parent material: Alluvium derived from sandstone and in loess
Slope: 3 to 15 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 9.4 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 1 (slightly sodic)
Ecological site: Clayey Foothills
Potential native vegetation: western wheatgrass, Wyoming big sagebrush, bluebunch wheatgrass, yellow rabbitbrush
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 5 inches; loam
5 to 22 inches; loam
22 to 60 inches; loam

Minor Components

Forelle and similar soils
Composition: About 10 percent

217—Yamo loam, 15 to 30 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,200 to 7,000 feet (1,890 to 2,134 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Yamo and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Yamo soils

Landform: Hillslopes
Parent material: Loess and in residuum derived from sandstone
Slope: 15 to 30 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 9.4 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 1 (slightly sodic)
Ecological site: Clayey Foothills
Potential native vegetation: western wheatgrass, Wyoming big sagebrush, bluebunch wheatgrass, yellow rabbitbrush
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 5 inches; loam
5 to 22 inches; loam
22 to 60 inches; loam

Minor Components

Rock outcrop
Composition: About 5 percent

Moderately deep soils over sandstone and similar soils
Composition: About 5 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)

218—Yellowwash-Piezon complex, 5 to 15 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,800 to 7,700 feet (2,073 to 2,347 meters)
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days
Note: The Yellowwash soil occupies areas where the vegetation is dominated by grasses. The Piezon soils occupy areas where the vegetation is dominated by Wyoming big sagebrush that collects snow and creates a moister environment.

Map Unit Composition

Yellowwash and similar soils: 50 percent
Piezon and similar soils: 35 percent
Minor components: 15 percent

Component Descriptions

Yellowwash soils

Landform: Hillslopes
Parent material: Residuum derived from siltstone
Slope: 5 to 15 percent
Depth to restrictive feature: 7 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 1.4 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 16 mmhos/cm (moderately saline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Loamy
Potential native vegetation: Wyoming big sagebrush, Indian ricegrass, needleandthread, streambank wheatgrass, Nevada bluegrass, bottlebrush squirreltail, shadscale saltbush, streambank wheatgrass, western wheatgrass
Land capability subclass (nonirrigated): 6s

Typical Profile:
0 to 2 inches; channery loam
2 to 10 inches; channery loam
10 to 14 inches; unweathered bedrock

Piezon soils

Landform: Hillslopes
Parent material: Residuum derived from siltstone
Slope: 5 to 15 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 5.3 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 25 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)

Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Rolling Loam
Potential native vegetation: western wheatgrass, Wyoming big sagebrush, needleandthread, Indian ricegrass, Nevada bluegrass, bottlebrush squirreltail, prairie Junegrass
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 4 inches; loam
4 to 30 inches; loam
30 to 34 inches; weathered bedrock

Minor Components

Deep soils and similar soils
Composition: About 15 percent

219—Youga loam, 3 to 15 percent slopes

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 7,000 to 7,800 feet (2,134 to 2,377 meters)
Mean annual precipitation: 18 to 20 inches (457 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Youga and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Youga soils

Landform: Plateaus
Parent material: Residuum derived from sandstone
Slope: 3 to 15 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 11.0 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: High
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam
Potential native vegetation: Letterman's needlegrass, slender wheatgrass, Saskatoon serviceberry, mountain big sagebrush, mountain brome, mountain snowberry, nodding brome
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 13 inches; loam
13 to 39 inches; clay loam
39 to 60 inches; sandy clay loam

Minor Components

Clayburn and similar soils
Composition: About 10 percent

220—Youga-Dinnen complex, 3 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 47
Elevation: 7,500 to 8,500 feet (2,286 to 2,591 meters)
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Youga and similar soils: 50 percent
Dinnen and similar soils: 40 percent
Minor components: 10 percent

Component Descriptions

Youga soils

Landform: Plateaus
Parent material: Alluvium derived from sandstone
Slope: 3 to 12 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 8.6 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam
Potential native vegetation: Letterman's needlegrass, slender wheatgrass, mountain big sagebrush, elk sedge, mountain brome, mountain snowberry, nodding brome, prairie Junegrass
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 12 inches; fine sandy loam
12 to 24 inches; sandy clay loam
24 to 36 inches; fine sandy loam
36 to 60 inches; fine sandy loam

Dinnen soils

Landform: Plateaus
Parent material: Eolian deposits and alluvium derived from sandstone
Slope: 3 to 12 percent
Drainage class: Well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 7.9 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam
Potential native vegetation: Letterman's needlegrass, slender wheatgrass, mountain big sagebrush, elk sedge, mountain brome, mountain snowberry, nodding brome
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 10 inches; fine sandy loam
10 to 20 inches; fine sandy loam
20 to 41 inches; gravelly fine sandy loam, fine sandy loam
41 to 60 inches; fine sandy loam, gravelly fine sandy loam

Minor Components

Adderton and similar soils
Composition: About 5 percent
Landform: Narrow concave drainageways

Morset and similar soils
Composition: About 5 percent
Landform: Concave and convex slopes on plateaus

221—Youga-Gelkie-Clayburn, warm complex, 25 to 45 percent slopes, extremely bouldery

Map Unit Setting

Major Land Resource Area: 48A
Elevation: 7,000 to 8,600 feet (2,134 to 2,621 meters)
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Freeze-free period: 50 to 75 days

Map Unit Composition

Youga and similar soils: 40 percent
Gelkie and similar soils: 30 percent
Clayburn and similar soils: 20 percent
Minor components: 10 percent

Component Descriptions

Youga soils

Landform: Mountainsides
Position on landform: Footslope, backslope
Parent material: Colluvium derived from basalt and sandstone
Slope: 25 to 45 percent, southern to western aspects
Surface fragments: About 5 percent stones, about 7 percent boulders
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 8.7 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Stony Loam
Potential native vegetation: bluebunch wheatgrass, Saskatoon serviceberry, antelope bitterbrush, Letterman's needlegrass, mountain big sagebrush, muttongrass, needleandthread, western wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 10 inches; stony fine sandy loam
10 to 42 inches; sandy clay loam
42 to 60 inches; fine sandy loam

Gelkie soils

Landform: Mountainsides
Position on landform: Backslope
Parent material: Colluvium derived from basalt and sandstone
Slope: 25 to 45 percent, southern to western aspects
Surface fragments: About 9 percent boulders, about 6 percent stones
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 8.9 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Dry Mountain Loam
Potential native vegetation: bluebunch wheatgrass, Wyoming big sagebrush, Letterman's needlegrass, Nevada bluegrass, antelope bitterbrush, bottlebrush squirreltail, mountain snowberry, muttongrass, needleandthread, sheep fescue
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 2 inches; very bouldery fine sandy loam
2 to 10 inches; bouldery sandy clay loam
10 to 22 inches; sandy clay loam
22 to 50 inches; sandy clay loam
50 to 60 inches; fine sandy loam

Clayburn soils

Landform: Mountainsides
Position on landform: Footslope
Parent material: Colluvium derived from sandstone
Slope: 25 to 35 percent, eastern to northern aspects
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 8.7 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam
Potential native vegetation: mountain big sagebrush, slender wheatgrass, western wheatgrass, Letterman's needlegrass, Saskatoon serviceberry, mountain brome, mountain snowberry, needleandthread
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 2 inches; slightly decomposed plant material
2 to 16 inches; fine sandy loam
16 to 39 inches; sandy clay loam
39 to 60 inches; fine sandy loam

Minor Components

Rock outcrop
Composition: About 5 percent
Landform: Mountainsides
Position on landform: Summit

Gebson and similar soils
Composition: About 5 percent
Landform: Mountainsides
Position on landform: Backslope

222—Youngston loam, cool, 0 to 3 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,300 to 6,000 feet (1,615 to 1,829 meters)
Mean annual precipitation: 7 to 10 inches (178 to 254 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Freeze-free period: 90 to 105 days

Map Unit Composition

Youngston and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Youngston soils

Landform: Flood plains
Parent material: Alluvium derived from mixed sources
Slope: 0 to 3 percent
Drainage class: Moderately well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 10.3 inches (high)

Shrink-swell potential: About 1.5 percent (low)
Flooding hazard: Rare
Seasonal high water table depth: About 48 to 72 inches
Runoff class: Low
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 8 mmhos/cm (slightly saline)
Sodium adsorption ratio maximum: About 10 (slightly sodic)
Ecological site: Cold Desert Overflow
Potential native vegetation: basin wildrye, common reed, fourwing saltbush, alkali sacaton, western wheatgrass
Land capability subclass (irrigated): 4c
Land capability subclass (nonirrigated): 6c

Typical Profile:
0 to 9 inches; loam
9 to 60 inches; stratified silt loam to clay loam

Minor Components

Winkleman and similar soils
Composition: About 4 percent
Landform: Oxbows, depressions

Baroid and similar soils
Composition: About 3 percent
Landform: Areas near the river channels

Eghelm and similar soils
Composition: About 3 percent
Landform: Areas near the river channels

223—Youngston loam, well drained, 0 to 3 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,700 to 6,300 feet (1,737 to 1,920 meters)
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Freeze-free period: 90 to 105 days

Map Unit Composition

Youngston and similar soils: 90 percent
Minor components: 10 percent

Component Descriptions

Youngston soils

Landform: Terraces, flood plains
Parent material: Alluvium derived from mixed sources
Slope: 0 to 3 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 11.7 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Flooding hazard: Rare
Runoff class: Medium
Calcium carbonate maximum: About 15 percent
Gypsum maximum: About 4 percent
Salinity maximum: About 8 mmhos/cm (slightly saline)
Sodium adsorption ratio maximum: About 12 (slightly sodic)
Ecological site: Foothill Swale
Potential native vegetation: basin wildrye, basin big sagebrush, streambank wheatgrass, western wheatgrass, winterfat
Land capability subclass (irrigated): 4c
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; loam
3 to 60 inches; stratified very fine sandy loam to clay loam

Minor Components

Eghelm and similar soils
Composition: About 5 percent

Baroid and similar soils
Composition: About 5 percent

224—Zillion-Barkelew, moist-Grapit complex, 25 to 65 percent slopes, extremely stony

Map Unit Setting

Major Land Resource Area: 47
Elevation: 7,000 to 8,000 feet (2,134 to 2,438 meters)
Mean annual precipitation: 15 to 16 inches (381 to 406 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days

Map Unit Composition

Zillion and similar soils: 35 percent
Barkelew and similar soils: 25 percent
Grapit and similar soils: 20 percent
Minor components: 20 percent

Component Descriptions

Zillion soils

Landform: Concave areas on mountainsides
Parent material: Colluvium derived from limestone and sandstone
Slope: 25 to 65 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 5.6 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 40 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam
Potential native vegetation: mountain big sagebrush, mountain snowberry, western wheatgrass, Letterman's needlegrass, Utah serviceberry, prairie Junegrass, slender wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 7 inches; loam
7 to 18 inches; cobbly loam
18 to 26 inches; very cobbly loam
26 to 60 inches; extremely cobbly sandy clay loam

Barkelew soils

Landform: Steeper convex areas on mountainsides
Parent material: Colluvium derived from limestone and sandstone
Slope: 25 to 65 percent
Surface fragments: About 6 percent stones
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 5.4 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 40 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 1 (slightly sodic)
Ecological site: Dry Exposure
Potential native vegetation: bluebunch wheatgrass, Indian ricegrass, mountain big sagebrush, needleandthread, prairie sagewort
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 2 inches; very gravelly loam
2 to 7 inches; cobbly loam
7 to 16 inches; very cobbly clay loam
16 to 34 inches; very cobbly clay loam
34 to 60 inches; very cobbly sandy clay loam

Grapit soils

Landform: Less steep convex areas on mountainsides
Parent material: Colluvium derived from limestone
Slope: 25 to 65 percent
Surface fragments: About 4 percent stones
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 6.1 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 50 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam
Potential native vegetation: mountain snowberry, Letterman's needlegrass, bluebunch wheatgrass, mountain big sagebrush, slender wheatgrass, Saskatoon serviceberry
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 9 inches; channery loam
9 to 36 inches; very channery loam
36 to 60 inches; extremely channery loam

Minor Components

Moderately deep soils and similar soils
Composition: About 10 percent
Landform: Steepest convex areas on hillsides
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)

Garlips and similar soils
Composition: About 10 percent

Landform: Steep drainageways
Slope: 25 to 60 percent

225—Abracon-Solirec complex, 3 to 8 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,300 to 6,300 feet (1,615 to 1,920 meters)
Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Freeze-free period: 110 to 140 days
Note: This is a join unit from the Dinosaur National Monument soil survey area.

Map Unit Composition

Abracon and similar soils: 45 percent
Solirec and similar soils: 40 percent
Minor components: 15 percent

Component Descriptions

Abracon soils

Landform: Mesas, hills, fan remnants
Position on landform: Toeslope, footslope
Parent material: Strongly calcareous loamy alluvium
Slope: 3 to 8 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 9.4 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 40 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 10 (slightly sodic)
Ecological site: Semidesert Loam (Wyoming Big Sagebrush)
Potential native vegetation: Indian ricegrass, Wyoming big sagebrush, bottlebrush squirreltail, galleta, needleandthread, globemallow, winterfat
Land capability subclass (irrigated): 3e
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 4 inches; loam
4 to 10 inches; loam
10 to 51 inches; loam
51 to 60 inches; loam

Solirec soils

Landform: Fan remnants, hillslopes, mesas
Position on landform: Toeslope, footslope
Parent material: Eolian deposits over alluvium and/or colluvium derived from limestone and sandstone
Slope: 3 to 8 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 9.7 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Medium
Calcium carbonate maximum: About 40 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Semidesert Loam (Wyoming Big Sagebrush)
Potential native vegetation: Indian ricegrass, Wyoming big sagebrush, bottlebrush squirreltail, galleta, needleandthread, globemallow, winterfat
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 4 inches; fine sandy loam
4 to 12 inches; sandy clay loam
12 to 19 inches; loam
19 to 75 inches; clay loam

Minor Components

Clapper and similar soils
Composition: About 10 percent

Yarts and similar soils
Composition: About 5 percent

226—Arches-Mespun-Rock outcrop complex, 4 to 40 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,100 to 6,000 feet (1,554 to 1,829 meters)
Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Freeze-free period: 110 to 140 days
Note: This is a join unit from the Dinosaur National Monument soil survey area.

Map Unit Composition

Arches and similar soils: 45 percent
Mespun and similar soils: 20 percent
Rock outcrop: 20 percent
Minor components: 15 percent

Component Descriptions

Arches soils

Landform: Hills
Position on landform: Toeslope, footslope
Parent material: Eolian deposits derived from sandstone
Slope: 5 to 40 percent
Depth to restrictive feature: 5 to 20 inches to bedrock (lithic)
Drainage class: Excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Available water capacity: About 0.7 inch (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Pinyon-Juniper
Potential native vegetation:
Common trees: Utah juniper, twoneedle pinyon
Other plants: black sagebrush, saline wildrye, Mormon tea, bluebunch wheatgrass, galleta
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 2 inches; loamy fine sand
2 to 5 inches; loamy fine sand
5 to 9 inches; fine sand
9 to 13 inches; unweathered bedrock

Mespun soils

Landform: Fan remnants, hillslopes
Position on landform: Footslope, toeslope
Parent material: Eolian deposits
Slope: 4 to 25 percent
Drainage class: Excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Available water capacity: About 4.7 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very low
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Semidesert Sand (Fourwing Saltbush)
Potential native vegetation: Indian ricegrass, fourwing saltbush, needleandthread, sand sagebrush, crispleaf buckwheat, galleta, scarlet globemallow
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 3 inches; fine sand
3 to 60 inches; fine sand

Rock outcrop

Landform: Hillslopes
Parent material: Exposed hard bedrock sandstone
Slope: 4 to 99 percent
Depth to restrictive feature: 0 inches to bedrock (lithic)
Available water capacity: About 0.0 inches (very low)
Runoff class: Very high
Land capability subclass (nonirrigated): 8

Minor Components

Yarts and similar soils
Composition: About 5 percent
Slope: 4 to 8 percent
Drainage class: Well drained
Ecological site: Semidesert Sandy Loam (Fourwing Saltbush)

Clapper and similar soils
Composition: About 5 percent
Slope: 25 to 50 percent
Drainage class: Well drained
Ecological site: Pinyon-Juniper

Begay and similar soils
Composition: About 5 percent
Slope: 2 to 15 percent
Drainage class: Well drained
Ecological site: Semidesert Sandy Loam (Fourwing Saltbush)

227—Bankard family-Cameo complex, 0 to 5 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,000 to 6,000 feet (1,524 to 1,829 meters)
Mean annual precipitation: 10 to 14 inches (254 to 356 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)

Freeze-free period: 90 to 105 days
Note: This is a join unit from the Dinosaur National Monument soil survey area.

Map Unit Composition

Bankard family and similar soils: 55 percent
Cameo and similar soils: 35 percent
Minor components: 10 percent

Component Descriptions

Bankard family soils

Landform: Upper flood plains
Parent material: Various source alluvium
Slope: 0 to 5 percent
Drainage class: Excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Available water capacity: About 4.7 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Flooding hazard: Rare
Runoff class: Negligible
Calcium carbonate maximum: About 25 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Loamy Bottom (Basin Big Sagebrush)
Potential native vegetation: basin big sagebrush, basin wildrye, Indian ricegrass, alkali sacaton, needleandthread, western wheatgrass
Land capability subclass (nonirrigated): 4c

Typical Profile:
0 to 2 inches; sand
2 to 60 inches; sand

Cameo soils

Landform: Upper flood plains
Parent material: Various source alluvium
Slope: 0 to 5 percent
Drainage class: Well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 9.3 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Flooding hazard: Rare
Runoff class: Very low
Calcium carbonate maximum: About 30 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Loamy Bottom (Basin Big Sagebrush)
Potential native vegetation: basin big sagebrush, basin wildrye, Indian ricegrass, alkali sacaton, needleandthread, fourwing saltbush, galleta
Land capability subclass (nonirrigated): 4c

Typical Profile:
0 to 2 inches; loamy fine sand
2 to 60 inches; fine sandy loam

Minor Components

Mido and similar soils
Composition: About 5 percent

Fluvaquents and similar soils
Composition: About 3 percent
Landform: Flood plains
Slope: 0 to 1 percent
Drainage class: Poorly drained
Ecological site: not specified

Solirec and similar soils
Composition: About 2 percent

228—Bondman-Rock outcrop complex, 5 to 40 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,500 to 6,200 feet (1,676 to 1,890 meters)
Mean annual precipitation: 10 to 12 inches (254 to 305 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Freeze-free period: 90 to 105 days
Note: This is a join unit from the Dinosaur National Monument soil survey area.

Map Unit Composition

Bondman and similar soils: 50 percent
Rock outcrop: 35 percent
Minor components: 15 percent

Component Descriptions

Bondman soils

Landform: Mountains
Position on landform: Backslope, shoulder, summit
Parent material: Residuum weathered from sandstone
Slope: 5 to 40 percent
Depth to restrictive feature: 7 to 20 inches to bedrock (lithic)
Drainage class: Well drained

Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 1.2 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Pinyon-Juniper
Potential native vegetation:
Common trees: Utah juniper, twoneedle pinyon
Other plants: Utah juniper, Indian ricegrass, Wyoming big sagebrush, galleta, black sagebrush, bluebunch wheatgrass, needleandthread, plains pricklypear, scarlet globemallow, twoneedle pinyon, broom snakeweed
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 2 inches; sandy loam
2 to 8 inches; sandy clay loam
8 to 12 inches; unweathered bedrock

Rock outcrop

Landform: Mountains, ridges, cliffs
Parent material: Exposed hard bedrock sandstone
Slope: 5 to 40 percent
Depth to restrictive feature: 0 inches to bedrock (lithic)
Available water capacity: About 0.0 inches (very low)
Runoff class: Very high
Land capability subclass (nonirrigated): 8

Minor Components

Anasazi and similar soils
Composition: About 5 percent

Mido and similar soils
Composition: About 5 percent

Strych and similar soils
Composition: About 5 percent

229—Cameo loamy fine sand, 0 to 5 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,000 to 6,000 feet (1,524 to 1,829 meters)
Mean annual precipitation: 10 to 13 inches (254 to 330 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Freeze-free period: 90 to 105 days
Note: This is a join unit from the Dinosaur National Monument soil survey area.

Map Unit Composition

Cameo and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Cameo soils

Landform: Upper flood plains
Parent material: Various source alluvium
Slope: 0 to 5 percent
Drainage class: Well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 9.3 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Flooding hazard: Rare
Runoff class: Very low
Calcium carbonate maximum: About 30 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Loamy Bottom (Basin Big Sagebrush)
Potential native vegetation: basin big sagebrush, basin wildrye, Indian ricegrass, alkali sacaton, needleandthread, fourwing saltbush, galleta
Land capability subclass (nonirrigated): 4c

Typical Profile:
0 to 2 inches; loamy fine sand
2 to 60 inches; fine sandy loam

Minor Components

Fluvaquents and similar soils
Composition: About 10 percent
Landform: Flood plains
Slope: 0 to 1 percent
Drainage class: Poorly drained
Ecological site: not specified

Yarts and similar soils
Composition: About 5 percent

230—Cragnot-Pensore-Grapit association, 6 to 75 percent slopes, very stony

Map Unit Setting

Major Land Resource Area: 47
Elevation: 6,300 to 8,500 feet (1,920 to 2,591 meters)
Mean annual precipitation: 12 to 14 inches (305 to 356 millimeters)
Mean annual air temperature: 43 to 45 degrees F. (6.1 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days
Note: This is a join unit from the Dinosaur National Monument soil survey area.

Map Unit Composition

Cragnot and similar soils: 35 percent
Pensore and similar soils: 35 percent
Grapit and similar soils: 15 percent
Minor components: 15 percent

Component Descriptions

Cragnot soils

Landform: Valleys, hills
Position on landform: Backslope, footslope
Parent material: Alluvium and/or colluvium and/or residuum weathered from limestone
Slope: 6 to 75 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 4.1 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 60 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Pinyon-Juniper
Potential native vegetation:
Common trees: Utah juniper, twoneedle pinyon
Other plants: twoneedle pinyon, Indian ricegrass, Utah juniper, bluebunch wheatgrass, Nevada bluegrass, Wyoming big sagebrush, black sagebrush, needleandthread, stemless goldenweed, true mountain mahogany, antelope bitterbrush, Mormon tea
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 3 inches; very channery loam
3 to 12 inches; very channery silt loam
12 to 38 inches; extremely channery silt loam
38 to 60 inches; very channery silt loam

Pensore soils

Landform: Valleys, hills
Position on landform: Backslope, footslope
Parent material: Residuum weathered from limestone
Slope: 6 to 75 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 1.0 inch (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 60 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Pinyon-Juniper
Potential native vegetation:
Common trees: Utah juniper, twoneedle pinyon
Other plants: twoneedle pinyon, Indian ricegrass, Utah juniper, bluebunch wheatgrass, Nevada bluegrass, Wyoming big sagebrush, black sagebrush, needleandthread, prairie Junegrass, stemless goldenweed, true mountain mahogany, antelope bitterbrush, Mormon tea
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 3 inches; gravelly loam
3 to 10 inches; extremely cobbly loam
10 to 16 inches; extremely channery loam
16 to 20 inches; unweathered bedrock

Grapit soils

Landform: Valleys, hills
Position on landform: Footslope, backslope

Parent material: Slope alluvium and/or colluvium derived from limestone
Slope: 12 to 75 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 3.7 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 50 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Pinyon-Juniper
Potential native vegetation:
Common trees: Utah juniper, twoneedle pinyon
Other plants: twoneedle pinyon, Wyoming big sagebrush, bluebunch wheatgrass, Indian ricegrass, western wheatgrass, Nevada bluegrass, prairie Junegrass, true mountain mahogany
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 5 inches; gravelly loam
5 to 14 inches; very gravelly loam
14 to 30 inches; extremely gravelly loam
30 to 54 inches; extremely cobbly loam
54 to 60 inches; very cobbly loam

Minor Components

Lakebench and similar soils
Composition: About 10 percent

Rock outcrop
Composition: About 5 percent

231—Green River-Fluvaquents complex, 0 to 2 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 4,700 to 5,800 feet (1,433 to 1,768 meters)
Mean annual precipitation: 5 to 12 inches (127 to 305 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Freeze-free period: 110 to 140 days
Note: This is a join unit from the Dinosaur National Monument soil survey area.

Map Unit Composition

Green River and similar soils: 70 percent
Fluvaquents and similar soils: 15 percent
Minor components: 15 percent

Component Descriptions

Green River soils

Landform: Upper flood plains
Parent material: Alluvium
Slope: 0 to 2 percent
Drainage class: Moderately well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 5.5 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Flooding hazard: Rare
Seasonal high water table depth: About 24 to 48 inches
Runoff class: Very low
Calcium carbonate maximum: About 15 percent
Gypsum maximum: About 2 percent
Salinity maximum: About 8 mmhos/cm (slightly saline)
Sodium adsorption ratio maximum: About 15 (moderately sodic)
Ecological site: River Floodplain (Fremont Cottonwood)
Potential native vegetation: bluegrass, sandbar willow, wheatgrass, basin big sagebrush, rubber rabbitbrush, Fremont's cottonwood, alkali sacaton, inland saltgrass
Land capability subclass (irrigated): 4w
Land capability subclass (nonirrigated): 7w

Typical Profile:
0 to 5 inches; fine sandy loam
5 to 60 inches; stratified coarse sand to loam

Fluvaquents soils

Landform: Lower oxbows, flood plains
Parent material: Various source alluvium
Slope: 0 to 1 percent
Drainage class: Poorly drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 6.8 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Flooding hazard: Frequent
Ponding hazard: Frequent
Seasonal high water table depth: About 0 to 18 inches
Runoff class: Negligible

Calcium carbonate maximum: About 25 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: not specified
Potential native vegetation: cattail, rush, sedge, willow, common reed, reed canarygrass
Land capability subclass (nonirrigated): 6w

Typical Profile:
0 to 5 inches; fine sand
5 to 60 inches; loam, sand, fine sandy loam

Minor Components

Bankard family and similar soils
Composition: About 10 percent
Slope: 0 to 5 percent
Drainage class: Excessively drained
Ecological site: Loamy Bottom (Basin Big Sagebrush)

Riverwash
Composition: About 5 percent
Landform: Channels
Slope: 0 to 4 percent

232—Lakebench-Strell complex, 5 to 30 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,200 to 7,000 feet (1,890 to 2,134 meters)
Mean annual precipitation: 12 to 14 inches (305 to 356 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days
Note: This is a join unit from the Dinosaur National Monument soil survey area.

Map Unit Composition

Lakebench and similar soils: 50 percent
Strell and similar soils: 35 percent
Minor components: 15 percent

Component Descriptions

Lakebench soils

Landform: Structural benches, alluvial fans
Position on landform: Toeslope, footslope
Parent material: Mixed source alluvium and/or residuum
Slope: 5 to 30 percent
Drainage class: Well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 9.1 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 40 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Rolling Loam
Potential native vegetation: Wyoming big sagebrush, needleandthread, western wheatgrass, bottlebrush squirreltail, Indian ricegrass, Sandberg bluegrass, bluebunch wheatgrass, scarlet globemallow
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; loamy fine sand
3 to 9 inches; loam
9 to 45 inches; loam
45 to 50 inches; gravelly loam
50 to 60 inches; loam

Strell soils

Landform: Cuestas, mesas
Position on landform: Footslope, toeslope
Parent material: Slope alluvium and/or colluvium derived from sandstone
Slope: 5 to 30 percent
Depth to restrictive feature: 7 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Available water capacity: About 1.1 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 25 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Pinyon-Juniper
Potential native vegetation:
Common trees: Utah juniper, twoneedle pinyon
Other plants: Utah juniper, Indian ricegrass, Wyoming big sagebrush, bluebunch wheatgrass, bottlebrush squirreltail, broom

snakeweed, needleandthread, prairie Junegrass, scarlet globemallow, twoneedle pinyon, western wheatgrass
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 3 inches; loamy fine sand
3 to 13 inches; sand
13 to 17 inches; unweathered bedrock

Minor Components

Mantlemine and similar soils
Composition: About 5 percent
Slope: 3 to 15 percent
Drainage class: Well drained
Ecological site: Rolling Loam

Rock outcrop
Composition: About 5 percent
Slope: 3 to 45 percent
Depth to restrictive feature: 0 inches to bedrock (lithic)

Yampa and similar soils
Composition: About 5 percent
Slope: 5 to 30 percent
Drainage class: Well drained
Ecological site: Pinyon-Juniper

233—Lakebench-Yampa complex, 5 to 30 percent slopes, very stony

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 7,000 feet (1,829 to 2,134 meters)
Mean annual precipitation: 12 to 15 inches (305 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 90 days
Note: This is a join unit from the Dinosaur National Monument soil survey area.

Map Unit Composition

Lakebench and similar soils: 50 percent
Yampa and similar soils: 35 percent
Minor components: 15 percent

Component Descriptions

Lakebench soils

Landform: Structural benches, fan remnants
Parent material: Mixed source alluvium and/or residuum
Slope: 5 to 30 percent
Drainage class: Well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 9.2 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 40 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Rolling Loam
Potential native vegetation: Wyoming big sagebrush, needleandthread, western wheatgrass, bottlebrush squirreltail, Indian ricegrass, Sandberg bluegrass, bluebunch wheatgrass, scarlet globemallow
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; silt loam
3 to 9 inches; loam
9 to 45 inches; loam
45 to 50 inches; gravelly loam
50 to 60 inches; loam

Yampa soils

Landform: Structural benches, fan remnants
Parent material: Mixed calcareous source alluvium and/or colluvium and/or residuum
Slope: 5 to 30 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 3.3 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 40 percent
Gypsum maximum: None
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 1 (slightly sodic)
Ecological site: Pinyon-Juniper
Potential native vegetation:
Common trees: Utah juniper, twoneedle pinyon
Other plants: Utah juniper, bluebunch wheatgrass, Indian ricegrass, Wyoming big sagebrush, black sagebrush,

needleandthread, prairie Junegrass, twoneedle pinyon, western wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 7 inches; very cobbly loam
7 to 13 inches; extremely gravelly loam
13 to 31 inches; very cobbly loam
31 to 60 inches; extremely cobbly sandy loam

Minor Components

Mantlemine and similar soils
Composition: About 10 percent
Slope: 3 to 15 percent
Drainage class: Well drained
Ecological site: Rolling Loam

Emlin and similar soils
Composition: About 5 percent
Slope: 1 to 12 percent
Drainage class: Well drained
Ecological site: Mountain Loam (Mountain Big Sagebrush)

234—Mantlemine loam, 1 to 8 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,000 to 7,200 feet (1,829 to 2,195 meters)
Mean annual precipitation: 12 to 15 inches (305 to 381 millimeters)
Mean annual air temperature: 42 to 46 degrees F. (5.6 to 7.8 degrees C.)
Freeze-free period: 75 to 95 days
Note: This is a join unit from the Dinosaur National Monument soil survey area.

Map Unit Composition

Mantlemine and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Mantlemine soils

Landform: Structural benches
Parent material: Alluvium and/or residuum weathered from limestone and sandstone
Slope: 1 to 8 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 10.4 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 25 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Rolling Loam
Potential native vegetation: Wyoming big sagebrush, needleandthread, western wheatgrass, Sandberg bluegrass, bluebunch wheatgrass, Indian ricegrass, bottlebrush squirreltail, prairie Junegrass, scarlet globemallow
Land capability subclass (nonirrigated): 4c

Typical Profile:
0 to 5 inches; loam
5 to 20 inches; clay loam
20 to 25 inches; clay loam
25 to 45 inches; clay loam
45 to 60 inches; loam

Minor Components

Emlin and similar soils
Composition: About 5 percent
Slope: 1 to 12 percent
Drainage class: Well drained
Ecological site: Mountain Loam (Mountain Big Sagebrush)

Yampa and similar soils
Composition: About 5 percent
Slope: 3 to 15 percent
Drainage class: Well drained
Ecological site: Rolling Loam

Redrock family and similar soils
Composition: About 5 percent
Slope: 3 to 15 percent
Drainage class: Well drained
Ecological site: Rolling Loam

235—Mantlemine-Emlin complex, 1 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 47
Elevation: 6,600 to 7,800 feet (2,012 to 2,377 meters)
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 46 degrees F. (5.6 to 7.8 degrees C.)
Freeze-free period: 75 to 95 days

Note: This is a join unit from the Dinosaur National Monument soil survey area.

Map Unit Composition

Mantlemine and similar soils: 55 percent
Emlin and similar soils: 30 percent
Minor components: 15 percent

Component Descriptions

Mantlemine soils

Landform: Structural benches
Position on landform: Footslope, toeslope
Parent material: Alluvium and/or residuum weathered from limestone and sandstone
Slope: 1 to 12 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 10.4 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 25 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Rolling Loam
Potential native vegetation: Wyoming big sagebrush, needleandthread, western wheatgrass, Sandberg bluegrass, bluebunch wheatgrass, Indian ricegrass, bottlebrush squirreltail, prairie Junegrass, scarlet globemallow
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 5 inches; loam
5 to 20 inches; clay loam
20 to 25 inches; clay loam
25 to 45 inches; loam
45 to 60 inches; loam

Emlin soils

Landform: Structural benches
Position on landform: Footslope, toeslope
Parent material: Alluvium derived from sandstone
Slope: 1 to 12 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 10.3 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: High
Calcium carbonate maximum: About 30 percent
Gypsum maximum: None
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 1 (slightly sodic)
Ecological site: Mountain Loam (Mountain Big Sagebrush)
Potential native vegetation: mountain big sagebrush, needleandthread, western wheatgrass, Nevada bluegrass, Sandberg bluegrass, Utah serviceberry, bottlebrush squirreltail, mountain snowberry, prairie Junegrass, scarlet globemallow, yellow rabbitbrush
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 11 inches; loam
11 to 19 inches; clay loam
19 to 60 inches; silty clay loam

Minor Components

Yampa and similar soils
Composition: About 5 percent
Slope: 3 to 15 percent
Drainage class: Well drained
Ecological site: Rolling Loam

Cragnot and similar soils
Composition: About 5 percent
Slope: 6 to 75 percent
Drainage class: Well drained
Ecological site: Pinyon-Juniper

Grapit and similar soils
Composition: About 5 percent
Slope: 12 to 75 percent
Drainage class: Well drained
Ecological site: Pinyon-Juniper

236—Mido loamy fine sand, 3 to 12 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,350 to 5,950 feet (1,631 to 1,814 meters)
Mean annual precipitation: 10 to 12 inches (254 to 305 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Freeze-free period: 90 to 105 days
Note: This is a join unit from the Dinosaur National Monument soil survey area.

Map Unit Composition

Mido and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Mido soils

Landform: Hills
Position on landform: Toeslope
Parent material: Alluvium
Slope: 3 to 12 percent
Drainage class: Excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Available water capacity: About 5.9 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very low
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Semidesert Sandy Loam
Potential native vegetation: needleandthread, Indian ricegrass, fourwing saltbush, galleta, Wyoming big sagebrush, bottlebrush squirreltail, scarlet globemallow, shadscale saltbush, winterfat
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 8 inches; loamy fine sand
8 to 60 inches; loamy fine sand

Minor Components

Tsetaa family and similar soils
Composition: About 10 percent
Slope: 3 to 45 percent
Drainage class: Excessively drained
Ecological site: Pinyon-Juniper

Anasazi and similar soils
Composition: About 5 percent
Slope: 3 to 25 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Pinyon-Juniper

237—Mikim complex, 1 to 4 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,000 to 5,400 feet (1,524 to 1,646 meters)
Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Freeze-free period: 110 to 140 days
Note: This is a join unit from the Dinosaur National Monument soil survey area.

Map Unit Composition

Mikim and similar soils: 55 percent
Mikim and similar soils: 35 percent
Minor components: 10 percent

Component Descriptions

Mikim soils

Landform: Alluvial flats, alluvial fans
Parent material: Alluvium
Slope: 1 to 3 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 9.6 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Low
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Semidesert Loam (Wyoming Big Sagebrush)
Potential native vegetation: Indian ricegrass, Wyoming big sagebrush, bottlebrush squirreltail, galleta, needleandthread, scarlet globemallow, winterfat
Land capability subclass (irrigated): 3e
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 6 inches; loam
6 to 60 inches; loam

Mikim soils

Landform: Alluvial flats, alluvial fans
Parent material: Alluvium
Slope: 1 to 4 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 8.9 inches (moderate)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Low
Calcium carbonate maximum: About 10 percent

Gypsum maximum: None
Salinity maximum: About 8 mmhos/cm (slightly saline)
Sodium adsorption ratio maximum: About 12 (slightly sodic)
Ecological site: Alkali Flat (Black Greasewood)
Potential native vegetation: greasewood, alkali sacaton, bottlebrush squirreltail, shadscale saltbush, Indian ricegrass, galleta, seepweed
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 6 inches; silt loam
6 to 60 inches; stratified sandy loam to clay loam

Minor Components

Hanksville and similar soils
Composition: About 10 percent
Slope: 25 to 50 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Desert Shallow Clay (Mat Saltbush)

238—Milok fine sandy loam, 3 to 8 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 4,800 to 6,000 feet (1,463 to 1,829 meters)
Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Freeze-free period: 110 to 140 days
Note: This is a join unit from the Dinosaur National Monument soil survey area.

Map Unit Composition

Milok and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Milok soils

Landform: Fan remnants
Parent material: Eolian deposits over alluvium and/or colluvium
Slope: 3 to 8 percent
Drainage class: Well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 7.0 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 20 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Semidesert Sandy Loam (Fourwing Saltbush)
Potential native vegetation: Indian ricegrass, needleandthread, fourwing saltbush, galleta, Wyoming big sagebrush
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 4 inches; fine sandy loam
4 to 15 inches; fine sandy loam
15 to 37 inches; fine sandy loam
37 to 50 inches; fine sandy loam
50 to 60 inches; sandy loam

Minor Components

Hanksville and similar soils
Composition: About 10 percent
Slope: 25 to 50 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Desert Shallow Clay (Mat Saltbush)

Abracon and similar soils
Composition: About 5 percent
Slope: 3 to 8 percent
Drainage class: Well drained
Ecological site: Semidesert Loam (Wyoming Big Sagebrush)

239—Milok-Solirec-Strych complex, 10 to 65 percent slopes, very stony

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,500 to 6,400 feet (1,676 to 1,951 meters)
Mean annual precipitation: 10 to 12 inches (254 to 305 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Freeze-free period: 90 to 105 days
Note: This is a join unit from the Dinosaur National Monument soil survey area.

Map Unit Composition

Milok and similar soils: 45 percent
Solirec and similar soils: 25 percent
Strych and similar soils: 15 percent
Minor components: 15 percent

Component Descriptions

Milok soils

Landform: Hillslopes
Position on landform: Backslope, footslope
Parent material: Eolian deposits over alluvium and/or colluvium
Slope: 10 to 65 percent
Drainage class: Well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 7.0 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 20 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Pinyon-Juniper
Potential native vegetation:
Common trees: twoneedle pinyon, Utah juniper
Other plants: Utah juniper, Indian ricegrass, galleta, Wyoming big sagebrush, needleandthread, twoneedle pinyon
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 4 inches; fine sandy loam
4 to 15 inches; fine sandy loam
15 to 37 inches; fine sandy loam
37 to 50 inches; fine sandy loam
50 to 60 inches; sandy loam

Solirec soils

Landform: Hillslopes
Position on landform: Footslope, backslope
Parent material: Eolian deposits over alluvium and/or colluvium derived from sandstone and shale
Slope: 10 to 40 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 10.4 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 40 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Semidesert Sandy Loam
Potential native vegetation: Indian ricegrass, needleandthread, Wyoming big sagebrush, fourwing saltbush, galleta, scarlet globemallow, shadscale saltbush, western wheatgrass, winterfat
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 8 inches; loam
8 to 52 inches; clay loam
52 to 60 inches; clay loam

Strych soils

Landform: Hillslopes
Position on landform: Backslope, footslope
Parent material: Alluvium and/or colluvium derived from limestone and sandstone
Slope: 10 to 65 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 5.1 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 40 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Pinyon-Juniper
Potential native vegetation:
Common trees: Utah juniper, twoneedle pinyon
Other plants: Utah juniper, Indian ricegrass, galleta, Mormon tea, Nevada bluegrass, Wyoming big sagebrush, black sagebrush, bluebunch wheatgrass, needleandthread, true mountain mahogany, winterfat
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 5 inches; cobbly loam
5 to 10 inches; cobbly loam
10 to 34 inches; very stony loam
34 to 50 inches; very cobbly loam
50 to 60 inches; loam

Minor Components

Cragnot and similar soils
Composition: About 10 percent
Slope: 6 to 75 percent

Drainage class: Well drained
Ecological site: Pinyon-Juniper

Rock outcrop
Composition: About 5 percent
Slope: 3 to 45 percent
Depth to restrictive feature: 0 inches to bedrock (lithic)

240—Milok-Strych complex, 3 to 25 percent slopes, very stony

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,000 to 6,000 feet (1,524 to 1,829 meters)
Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Freeze-free period: 90 to 140 days
Note: This is a join unit from the Dinosaur National Monument soil survey area.

Map Unit Composition

Milok and similar soils: 70 percent
Strych and similar soils: 20 percent
Minor components: 10 percent

Component Descriptions

Milok soils

Landform: Fan remnants
Parent material: Eolian deposits over alluvium and/or colluvium
Slope: 8 to 25 percent
Drainage class: Well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 9.3 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 20 percent
Gypsum maximum: About 2 percent
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Semidesert Sandy Loam (Fourwing Saltbush)
Potential native vegetation: Indian ricegrass, needleandthread, fourwing saltbush, galleta, Wyoming big sagebrush
Land capability subclass (nonirrigated): 7e
Typical Profile:
0 to 6 inches; fine sandy loam
6 to 12 inches; loam
12 to 37 inches; loam
37 to 44 inches; silt loam
44 to 60 inches; loam

Strych soils

Landform: Fan remnants
Parent material: Alluvium and/or colluvium derived from limestone and sandstone
Slope: 3 to 25 percent
Drainage class: Well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 3.5 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 40 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Semidesert Gravelly Sandy Loam (Wyoming Big Sagebrush)
Potential native vegetation: Wyoming big sagebrush, rubber rabbitbrush, spiny hopsage, Indian ricegrass, bluegrass, bottlebrush squirreltail, horsebrush, shadscale saltbush
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 8 inches; very cobbly fine sandy loam
8 to 39 inches; extremely cobbly sandy loam
39 to 60 inches; extremely cobbly loamy sand

Minor Components

Polychrome and similar soils
Composition: About 5 percent
Slope: 25 to 50 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Pinyon-Juniper

Solirec and similar soils
Composition: About 5 percent
Slope: 10 to 40 percent
Drainage class: Well drained
Ecological site: Semidesert Sandy Loam

241—Pensore-Roto complex, 3 to 45 percent slopes, very stony

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,500 to 7,500 feet (1,981 to 2,286 meters)
Mean annual precipitation: 12 to 14 inches (305 to 356 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days
Note: This is a join unit from the Dinosaur National Monument soil survey area.

Map Unit Composition

Pensore and similar soils: 60 percent
Roto and similar soils: 25 percent
Minor components: 15 percent

Component Descriptions

Pensore soils

Landform: Mesas, hills
Position on landform: Shoulder, backslope, summit
Parent material: Residuum weathered from limestone
Slope: 3 to 45 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 1.0 inch (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 60 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Pinyon-Juniper
Potential native vegetation:
Common trees: Utah juniper, twoneedle pinyon
Other plants: twoneedle pinyon, Indian ricegrass, Utah juniper, bluebunch wheatgrass, Nevada bluegrass, Wyoming big sagebrush, black sagebrush, needleandthread, prairie Junegrass, stemless goldenweed, true mountain mahogany, antelope bitterbrush, Mormon tea
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 3 inches; gravelly loam
3 to 10 inches; extremely cobbly loam
10 to 16 inches; extremely channery loam
16 to 20 inches; unweathered bedrock

Roto soils

Landform: Mesas, hills
Position on landform: Backslope, shoulder, summit
Parent material: Slope alluvium and/or colluvium over residuum weathered from limestone and sandstone
Slope: 3 to 45 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 1.4 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 60 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Pinyon-Juniper
Potential native vegetation:
Common trees: Utah juniper, twoneedle pinyon
Other plants: twoneedle pinyon, Indian ricegrass, bluebunch wheatgrass, Utah juniper, Wyoming big sagebrush, broom snakeweed, needleandthread, prairie Junegrass, stemless goldenweed, black sagebrush, western wheatgrass
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 2 inches; very gravelly loam
2 to 9 inches; very gravelly loam
9 to 22 inches; extremely gravelly sandy clay loam
22 to 26 inches; unweathered bedrock

Minor Components

Mantlemine and similar soils
Composition: About 10 percent
Slope: 3 to 25 percent
Drainage class: Well drained
Ecological site: Rolling Loam

Rock outcrop
Composition: About 5 percent
Slope: 5 to 35 percent
Depth to restrictive feature: 0 inches to bedrock (lithic)

242—Riverwash

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,000 to 5,650 feet (1,524 to 1,722 meters)
Mean annual precipitation: 8 to 14 inches (203 to 356 millimeters)
Freeze-free period: 90 to 140 days
Note: This is a join unit from the Dinosaur National Monument soil survey area.

Map Unit Composition

Riverwash: 85 percent
Minor components: 15 percent

Component Descriptions

Riverwash

Landform: Lower flood plains
Parent material: Alluvium
Slope: 0 to 4 percent
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Available water capacity: About 2.9 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Flooding hazard: Frequent
Seasonal high water table depth: About 0 to 24 inches
Runoff class: Negligible
Salinity maximum: About 0 mmhos/cm (nonsaline)
Land capability subclass (nonirrigated): 8

Minor Components

Green River and similar soils
Composition: About 10 percent
Slope: 0 to 2 percent
Drainage class: Moderately well drained
Ecological site: River Floodplain (Fremont Cottonwood)

Bankard family and similar soils
Composition: About 5 percent
Slope: 0 to 5 percent
Drainage class: Excessively drained
Ecological site: Loamy Bottom (Basin Big Sagebrush)

243—Rizno-Windcomb-Anasazi complex, 3 to 25 percent slopes, extremely flaggy

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,400 to 6,400 feet (1,646 to 1,951 meters)
Mean annual precipitation: 10 to 12 inches (254 to 305 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Freeze-free period: 90 to 105 days
Note: This is a join unit from the Dinosaur National Monument soil survey area.

Map Unit Composition

Rizno and similar soils: 35 percent
Windcomb and similar soils: 35 percent
Anasazi and similar soils: 15 percent
Minor components: 15 percent

Component Descriptions

Rizno soils

Landform: Cuestas
Parent material: Slope alluvium and/or colluvium over residuum weathered from limestone and sandstone
Slope: 3 to 25 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 1.7 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 40 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Pinyon-Juniper
Potential native vegetation:
Common trees: Utah juniper, twoneedle pinyon
Other plants: Utah juniper, Indian ricegrass, Wyoming big sagebrush, galleta, bluebunch wheatgrass, broom snakeweed, needleandthread, prairie Junegrass, shadscale saltbush, western wheatgrass
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 5 inches; cobbly fine sandy loam
5 to 15 inches; cobbly fine sandy loam
15 to 19 inches; unweathered bedrock

Windcomb soils

Landform: Cuestas
Parent material: Slope alluvium and/or colluvium

derived from limestone over residuum weathered from sandstone and siltstone
Slope: 3 to 25 percent
Depth to restrictive feature: 6 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 1.6 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 10 percent
Gypsum maximum: About 5 percent
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Pinyon-Juniper
Potential native vegetation:
Common trees: Utah juniper, twoneedle pinyon
Other plants: black sagebrush, saline wildrye, Mormon tea, bluebunch wheatgrass, galleta
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 4 inches; very channery silt loam
4 to 17 inches; very channery loam
17 to 21 inches; unweathered bedrock

Anasazi soils

Landform: Cuestas
Parent material: Alluvium and/or colluvium over residuum weathered from limestone and sandstone
Slope: 3 to 25 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 2.6 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 40 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Pinyon-Juniper
Potential native vegetation:
Common trees: Utah juniper, twoneedle pinyon
Other plants: Indian ricegrass, Utah juniper, Wyoming big sagebrush, galleta, needleandthread, bluebunch wheatgrass, broom snakeweed, prairie Junegrass, shadscale saltbush, western wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; fine sandy loam
3 to 10 inches; cobbly fine sandy loam
10 to 19 inches; gravelly fine sandy loam
19 to 24 inches; very gravelly loamy sand
24 to 28 inches; unweathered bedrock

Minor Components

Milok and similar soils
Composition: About 5 percent
Slope: 8 to 25 percent
Drainage class: Well drained
Ecological site: Semidesert Sandy Loam (Four-wing Saltbush)

Rock outcrop
Composition: About 5 percent
Slope: 3 to 45 percent
Depth to restrictive feature: 0 inches to bedrock (lithic)

Strych and similar soils
Composition: About 5 percent
Slope: 3 to 25 percent
Drainage class: Well drained
Ecological site: Semidesert Gravelly Sandy Loam (Wyoming Big Sagebrush)

244—Rock outcrop-Hackling complex, 10 to 45 percent slopes, very stony

Map Unit Setting

Major Land Resource Area: 47
Elevation: 5,800 to 8,400 feet (1,768 to 2,560 meters)
Mean annual precipitation: 12 to 15 inches (305 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days
Note: This is a join unit from the Dinosaur National Monument soil survey area.

Map Unit Composition

Rock outcrop: 60 percent
Hackling and similar soils: 30 percent
Minor components: 10 percent

Component Descriptions

Rock outcrop

Landform: Mountains, ridges, cliffs
Parent material: Exposed hard bedrock limestone and sandstone
Slope: 75 to 99 percent
Depth to restrictive feature: 0 inches to bedrock (lithic)
Available water capacity: About 0.0 inches (very low)
Runoff class: Very high
Ecological site: Pinyon-Juniper
Land capability subclass (nonirrigated): 8

Hackling soils

Landform: Mountains
Position on landform: Backslope, footslope
Parent material: Calcareous colluvium and/or residuum weathered from limestone and sandstone
Slope: 10 to 45 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 0.7 inch (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Potential native vegetation:
Common trees: Utah juniper, twoneedle pinyon
Other plants: twoneedle pinyon, Wyoming big sagebrush, bluebunch wheatgrass, Indian ricegrass, Utah juniper, antelope bitterbrush, bottlebrush squirreltail, broom snakeweed, needleandthread, prairie Junegrass, sand dropseed, true mountain mahogany
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 1 inch; gravelly sandy loam
1 inch to 4 inches; very gravelly sandy loam
4 to 15 inches; extremely cobbly sandy loam
15 to 19 inches; unweathered bedrock

Minor Components

Lodore and similar soils
Composition: About 5 percent
Slope: 3 to 45 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Pinyon-Juniper

Roto and similar soils
Composition: About 5 percent
Slope: 3 to 45 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Pinyon-Juniper

245—Rock outcrop, Torriorthents, and Ustorthents soils, 25 to 75 percent slopes, rubbly

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,000 to 8,000 feet (1,524 to 2,438 meters)
Mean annual precipitation: 9 to 16 inches (229 to 406 millimeters)
Freeze-free period: 75 to 105 days
Note: This is a join unit from the Dinosaur National Monument soil survey area.

Map Unit Composition

Rock outcrop: 30 percent
Torriorthents and similar soils: 30 percent
Ustorthents and similar soils: 30 percent
Minor components: 10 percent

Component Descriptions

Rock outcrop

Landform: Cliffs, canyons, mountains
Parent material: Exposed hard bedrock limestone and sandstone
Slope: 25 to 99 percent
Depth to restrictive feature: 0 inches to bedrock (lithic)
Available water capacity: About 0.0 inches (very low)
Runoff class: Very high
Land capability subclass (nonirrigated): 8

Torriorthents soils

Landform: Canyons, mountains
Position on landform: Backslope, footslope
Parent material: Colluvium and/or residuum weathered from limestone and sandstone
Slope: 25 to 75 percent

Depth to restrictive feature: 4 to 30 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 1.3 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 50 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: not specified
Potential native vegetation: Indian ricegrass, Mormon tea, Utah juniper, bluebunch wheatgrass, Wyoming big sagebrush, antelope bitterbrush, needleandthread, true mountain mahogany, twoneedle pinyon, western wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 4 inches; very gravelly loam
4 to 18 inches; very gravelly loam
18 to 22 inches; unweathered bedrock

Ustorthents soils

Landform: Canyons, mountains
Position on landform: Backslope, footslope
Parent material: Colluvium and/or residuum weathered from sedimentary rock
Slope: 25 to 75 percent
Depth to restrictive feature: 10 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 4.0 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 5 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: not specified
Potential native vegetation: Indian ricegrass, bluebunch wheatgrass, mountain big sagebrush, Idaho fescue, Nevada bluegrass, Utah serviceberry, Wyoming big sagebrush, mountain snowberry, needleandthread, prairie Junegrass, true mountain mahogany
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 6 inches; cobbly loam
6 to 33 inches; cobbly sandy clay loam
33 to 37 inches; unweathered bedrock

Minor Components

Borolls and similar soils
Composition: About 10 percent
Slope: 25 to 75 percent
Depth to restrictive feature: 20 to 60 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: not specified

246—Schoonover-Duffymont complex, 3 to 25 percent slopes, rubbly

Map Unit Setting

Major Land Resource Area: 47
Elevation: 7,000 to 8,500 feet (2,134 to 2,591 meters)
Mean annual precipitation: 14 to 18 inches (356 to 457 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days
Note: This is a join unit from the Dinosaur National Monument soil survey area.

Map Unit Composition

Schoonover and similar soils: 55 percent
Duffymont and similar soils: 30 percent
Minor components: 15 percent

Component Descriptions

Schoonover soils

Landform: Mountains
Position on landform: Shoulder, summit
Parent material: Residuum weathered from limestone
Slope: 3 to 25 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 0.9 inch (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 40 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)

Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Windswept Ridge (Black Sagebrush)
Potential native vegetation: bluebunch wheatgrass, black sagebrush, prairie Junegrass, Indian ricegrass, Sandberg bluegrass, bottlebrush squirreltail, needleandthread, prairie sagewort, stemless goldenweed, western wheatgrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; very gravelly loam
3 to 8 inches; very gravelly loam
8 to 11 inches; very gravelly loam
11 to 14 inches; unweathered bedrock

Duffymont soils

Landform: Mountain slopes
Position on landform: Shoulder, summit
Parent material: Slope alluvium and/or colluvium derived from sandstone
Slope: 3 to 25 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 1.0 inch (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Shallow Loam (Mountain Big Sagebrush)
Potential native vegetation: bluebunch wheatgrass, mountain big sagebrush, antelope bitterbrush, needleandthread, Indian ricegrass, Nevada bluegrass, Utah serviceberry, arrowleaf balsamroot, sheep fescue
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 13 inches; extremely flaggy fine sandy loam
13 to 17 inches; extremely flaggy sandy loam
17 to 21 inches; unweathered bedrock

Minor Components

Emlin and similar soils
Composition: About 10 percent
Slope: 1 to 12 percent
Drainage class: Well drained
Ecological site: Mountain Loam (Mountain Big Sagebrush)

Rock outcrop
Composition: About 5 percent
Slope: 3 to 45 percent
Depth to restrictive feature: 0 inches to bedrock (lithic)

247—Stout-Rock outcrop complex, 5 to 35 percent slopes, very stony

Map Unit Setting

Major Land Resource Area: 47
Elevation: 6,800 to 7,800 feet (2,073 to 2,377 meters)
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days
Note: This is a join unit from the Dinosaur National Monument soil survey area.

Map Unit Composition

Stout and similar soils: 60 percent
Rock outcrop: 30 percent
Minor components: 10 percent

Component Descriptions

Stout soils

Landform: Mountains
Position on landform: Footslope, backslope
Parent material: Residuum weathered from sandstone
Slope: 5 to 35 percent
Depth to restrictive feature: 7 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 1.3 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Pinyon-Juniper

Potential native vegetation:
Common trees: Utah juniper, twoneedle pinyon
Other plants: twoneedle pinyon, Indian ricegrass, Nevada bluegrass, Utah juniper, Wyoming big sagebrush, antelope bitterbrush, black sagebrush, bluebunch wheatgrass, bottlebrush squirreltail, curlleaf mountain mahogany, needleandthread, prairie Junegrass
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 2 inches; sandy loam
2 to 11 inches; sandy loam
11 to 15 inches; unweathered bedrock

Rock outcrop

Landform: Mountains, ridges, cliffs
Parent material: Exposed hard bedrock sandstone
Slope: 5 to 35 percent
Depth to restrictive feature: 0 inches to bedrock (lithic)
Available water capacity: About 0.0 inches (very low)
Runoff class: Very high
Land capability subclass (nonirrigated): 8

Minor Components

Cortyzack and similar soils
Composition: About 10 percent
Slope: 3 to 25 percent
Drainage class: Well drained
Ecological site: Mountain Loam (Mountain Big Sagebrush)

248—Strych-Mellenthin complex, 3 to 45 percent slopes, very bouldery

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,500 to 6,500 feet (1,676 to 1,981 meters)
Mean annual precipitation: 10 to 12 inches (254 to 305 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Freeze-free period: 90 to 105 days
Note: This is a join unit from the Dinosaur National Monument soil survey area.

Map Unit Composition

Strych and similar soils: 50 percent
Mellenthin and similar soils: 35 percent
Minor components: 15 percent

Component Descriptions

Strych soils

Landform: Fan remnants, structural benches
Position on landform: Footslope, backslope
Parent material: Alluvium and/or colluvium derived from limestone and sandstone
Slope: 3 to 45 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 5.1 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 40 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Pinyon-Juniper
Potential native vegetation:
Common trees: Utah juniper, twoneedle pinyon
Other plants: Utah juniper, Indian ricegrass, galleta, Mormon tea, Nevada bluegrass, Wyoming big sagebrush, black sagebrush, bluebunch wheatgrass, needleandthread, true mountain mahogany, winterfat
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 5 inches; cobbly loam
5 to 10 inches; cobbly loam
10 to 34 inches; very stony loam
34 to 50 inches; very cobbly loam
50 to 60 inches; loam

Mellenthin soils

Landform: Fan remnants, structural benches
Position on landform: Backslope, footslope
Parent material: Colluvium over residuum weathered from limestone and sandstone
Slope: 3 to 45 percent
Surface fragments: About 2 percent stones
Depth to restrictive feature: 8 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 0.8 inch (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 40 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)

Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Pinyon-Juniper
Potential native vegetation:
Common trees: Utah juniper, twoneedle pinyon
Other plants: Utah juniper, Indian ricegrass, Wyoming big sagebrush, galleta, bluebunch wheatgrass, broom snakeweed, needleandthread, plains pricklypear, prairie Junegrass, twoneedle pinyon, western wheatgrass
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 2 inches; very stony sandy loam
2 to 12 inches; very stony sandy loam
12 to 16 inches; unweathered bedrock

Minor Components

Anasazi and similar soils
Composition: About 5 percent
Slope: 3 to 25 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Semidesert Sandy Loam

Rock outcrop
Composition: About 5 percent
Slope: 3 to 45 percent
Depth to restrictive feature: 0 inches to bedrock (lithic)

Windcomb and similar soils
Composition: About 5 percent
Slope: 3 to 25 percent
Depth to restrictive feature: 6 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Pinyon-Juniper

249—Zillion-Yampa-Clyl complex, 25 to 65 percent slopes, extremely flaggy

Map Unit Setting

Major Land Resource Area: 47
Elevation: 7,000 to 8,000 feet (2,134 to 2,438 meters)
Mean annual precipitation: 14 to 18 inches (356 to 457 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 75 to 95 days
Note: This is a join unit from the Dinosaur National Monument soil survey area.

Map Unit Composition

Zillion and similar soils: 40 percent
Yampa and similar soils: 25 percent
Clyl and similar soils: 20 percent
Minor components: 15 percent

Component Descriptions

Zillion soils

Landform: Mountains
Position on landform: Backslope
Parent material: Colluvium derived from limestone and sandstone
Slope: 25 to 65 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 4.9 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 40 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Stony Loam (Browse)
Potential native vegetation: mountain big sagebrush, mountain snowberry, western wheatgrass, Columbia needlegrass, Letterman's needlegrass, Utah serviceberry, arrowleaf balsamroot, prairie Junegrass, slender wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 7 inches; loam
7 to 18 inches; cobbly loam
18 to 26 inches; very cobbly loam
26 to 34 inches; very cobbly sandy clay loam
34 to 60 inches; extremely cobbly sandy clay loam

Yampa soils

Landform: Mountains
Position on landform: Backslope
Parent material: Colluvium and/or mixed calcareous source residuum
Slope: 25 to 65 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 3.3 inches (low)
Shrink-swell potential: About 1.5 percent (low)

Runoff class: High
Calcium carbonate maximum: About 40 percent
Gypsum maximum: None
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 1 (slightly sodic)
Ecological site: Mountain Windswept Ridge (Black Sagebrush)
Potential native vegetation: bluebunch wheatgrass, Indian ricegrass, Sandberg bluegrass, black sagebrush, needleandthread, prairie sagewort
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 7 inches; very cobbly loam
7 to 13 inches; extremely gravelly loam
13 to 31 inches; very cobbly loam
31 to 60 inches; extremely cobbly sandy loam

Clyl soils

Landform: Mountain slopes
Position on landform: Backslope
Parent material: Colluvium
Slope: 25 to 65 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 5.3 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 60 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Stony Loam (Browse)
Potential native vegetation: mountain snowberry, Letterman's needlegrass, bluebunch wheatgrass, mountain big sagebrush, slender wheatgrass, Columbia needlegrass, Utah serviceberry
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 2 inches; channery silt loam
2 to 9 inches; channery silt loam
9 to 19 inches; very channery silt loam
19 to 29 inches; very channery loam
29 to 60 inches; extremely flaggy loam

Minor Components

Emlin and similar soils
Composition: About 10 percent
Slope: 1 to 12 percent
Drainage class: Well drained
Ecological site: Mountain Loam (Mountain Big Sagebrush)

Pensore and similar soils
Composition: About 5 percent
Slope: 6 to 75 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Pinyon-Juniper

250—Abracon loam, 3 to 8 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,500 to 6,000 feet (1,676 to 1,829 meters)
Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Freeze-free period: 110 to 140 days
Note: This is a join unit from the Uintah Area, Utah soil survey area.

Map Unit Composition

Abracon and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Abracon soils

Landform: Fan remnants
Position on landform: Toeslope
Parent material: Slope alluvium derived from sandstone, limestone, shale, and quartzite
Slope: 3 to 8 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 9.4 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 40 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 10 (slightly sodic)
Ecological site: Semidesert Loam (Wyoming Big Sagebrush)
Potential native vegetation: Indian ricegrass, Wyoming big sagebrush, bottlebrush squirreltail, galleta, needleandthread, globemallow, winterfat

Land capability subclass (irrigated): 3e
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 4 inches; loam
4 to 10 inches; loam
10 to 51 inches; loam
51 to 60 inches; loam

Minor Components

Clapper and similar soils
Composition: About 8 percent
Slope: 4 to 25 percent
Ecological site: Semidesert Stony Loam (Utah Juniper-Pinyon)

Hanksville and similar soils
Composition: About 7 percent
Ecological site: Desert Clay (Shadscale)

251—Badland-Renegade complex, 50 to 80 percent slopes

Map Unit Setting

Major Land Resource Area: 47
Elevation: 6,200 to 7,800 feet (1,890 to 2,377 meters)
Mean annual precipitation: 16 to 22 inches (406 to 559 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Freeze-free period: 70 to 90 days
Note: This is a join unit from the Uintah Area, Utah soil survey area.

Map Unit Composition

Badland: 60 percent
Renegade and similar soils: 25 percent
Minor components: 15 percent

Component Descriptions

Badland

Description: Badland consists of very steep barren land that is dissected by many intermittent drainage channels. Badlands are associated with soft geologic materials of the Duchesne River formation. Local relief generally ranges from 0 to 1,000 feet. Potential runoff is very high and erosion is active.
Landform: Erosion remnants, hills, ridges
Slope: 50 to 80 percent
Depth to restrictive feature: 0 to 2 inches to bedrock (paralithic)
Drainage class: Somewhat excessively drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 0.1 inch (very low)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 15 percent
Gypsum maximum: About 10 percent
Salinity maximum: About 20 mmhos/cm (strongly saline)
Sodium adsorption ratio maximum: About 30 (strongly sodic)
Land capability subclass (nonirrigated): 8

Renegade soils

Landform: Hills
Parent material: Colluvium over residuum derived from shale and sandstone
Slope: 50 to 80 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 4.5 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Very Steep Stony Loam (Browse)
Potential native vegetation: Utah serviceberry, birchleaf mountain mahogany, bluebunch wheatgrass, Columbia needlegrass, arrowleaf balsamroot, bluegrass, needleandthread, snowberry
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 4 inches; very flaggy fine sandy loam
4 to 15 inches; flaggy fine sandy loam
15 to 47 inches; very flaggy fine sandy loam
47 to 58 inches; very flaggy sandy loam
58 to 62 inches; weathered bedrock

Minor Components

Rock outcrop
Composition: About 8 percent

Moonset and similar soils
Composition: About 7 percent

Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)
Ecological site: Upland Shallow Loam (Pinyon-Utah Juniper)

252—Bigtom-Namlot-Dokie association, 15 to 50 percent slopes

Map Unit Setting

Major Land Resource Area: 47
Elevation: 7,800 to 8,600 feet (2,377 to 2,621 meters)
Mean annual precipitation: 16 to 28 inches (406 to 711 millimeters)
Mean annual air temperature: 38 to 43 degrees F. (3.3 to 6.1 degrees C.)
Freeze-free period: 50 to 90 days
Note: This is a join unit from the Uintah Area, Utah soil survey area.

Map Unit Composition

Bigtom and similar soils: 50 percent
Namlot and similar soils: 20 percent
Dokie and similar soils: 15 percent
Minor components: 15 percent

Component Descriptions

Bigtom soils

Landform: Mountain slopes
Parent material: Slope alluvium derived from sandstone and quartzite
Slope: 15 to 25 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 3.2 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Stony Loam (Curlleaf Mountainmahogany)
Potential native vegetation: curlleaf mountain mahogany, bluebunch wheatgrass, mountain snowberry, Sandberg bluegrass, Utah serviceberry, common chokecherry
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 1 inch; slightly decomposed plant material
1 inch to 7 inches; extremely bouldery loam
7 to 12 inches; extremely stony loam
12 to 41 inches; extremely cobbly clay loam
41 to 61 inches; extremely cobbly sandy clay loam

Namlot soils

Landform: Mountain slopes
Parent material: Slope alluvium over residuum derived from sandstone
Slope: 15 to 40 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 0.9 inch (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Shallow Sandy Loam (Ponderosa Pine)
Potential native vegetation:
Common trees: ponderosa pine
Other plants: bluegrass, elk sedge, mountain big sagebrush, needleandthread, Indian ricegrass, Oregongrape, antelope bitterbrush, birchleaf mountain mahogany, mountain snowberry
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 3 inches; extremely cobbly sandy loam
3 to 7 inches; very cobbly sandy clay loam
7 to 17 inches; extremely cobbly sandy clay loam
17 to 21 inches; unweathered bedrock

Dokie soils

Landform: Mountain slopes
Parent material: Slope alluvium and colluvium derived from sandstone and quartzite
Slope: 25 to 50 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 2.5 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)

Sodium adsorption ratio maximum:
About 0 (nonsodic)
Ecological site: High Mountain Stony Loam (Douglas Fir)
Potential native vegetation:
Common trees: Rocky Mountain Douglas-fir
Other plants: mountain snowberry, Oregongrape, boxleaf myrtle, elk sedge, Woods' rose, bluegrass, heartleaf arnica, quaking aspen, slender wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 4 inches; slightly decomposed plant material
4 to 7 inches; extremely bouldery loam
7 to 16 inches; extremely bouldery loam
16 to 36 inches; extremely bouldery loam
36 to 64 inches; extremely bouldery sandy loam

Minor Components

Rock outcrop
Composition: About 5 percent

Flynncove and similar soils
Composition: About 5 percent
Slope: 25 to 38 percent
Ecological site: Mountain Stony Loam (Browse)

Duffymont and similar soils
Composition: About 5 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)

253—Clapper gravelly loam, 2 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,400 to 6,200 feet (1,646 to 1,890 meters)
Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Freeze-free period: 110 to 140 days
Note: This is a join unit from the Uintah Area, Utah soil survey area.

Map Unit Composition

Clapper and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Clapper soils

Landform: Fan remnants
Parent material: Slope alluvium derived from sandstone, limestone, shale, and quartzite
Slope: 2 to 25 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 4.9 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 40 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 10 (slightly sodic)
Ecological site: Semidesert Gravelly Loam (Wyoming Big Sagebrush)
Potential native vegetation: Wyoming big sagebrush, galleta, Indian ricegrass, needleandthread, bud sagebrush, shadscale saltbush, winterfat
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 7 inches; gravelly loam
7 to 13 inches; gravelly loam
13 to 36 inches; very gravelly loam
36 to 49 inches; very cobbly loam
49 to 60 inches; extremely cobbly sandy clay loam

Minor Components

Abracon and similar soils
Composition: About 3 percent

Rock outcrop
Composition: About 3 percent

Badland
Composition: About 3 percent

Mikim and similar soils
Composition: About 3 percent
Slope: 1 to 3 percent
Ecological site: Semidesert Loam (Wyoming Big Sagebrush)

Pherson and similar soils
Composition: About 3 percent

254—Cliff sandy loam, 2 to 4 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,400 to 6,400 feet (1,646 to 1,951 meters)
Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Freeze-free period: 110 to 140 days
Note: This is a join unit from the Uintah Area, Utah soil survey area.

Map Unit Composition

Cliff and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Cliff soils

Landform: Alluvial flats
Parent material: Alluvium derived from sandstone, limestone, shale, and quartzite
Slope: 2 to 4 percent
Drainage class: Well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 6.5 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very low
Calcium carbonate maximum: About 15 percent
Gypsum maximum: None
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 13 (moderately sodic)
Ecological site: Semidesert Sandy Loam (Fourwing Saltbush)
Potential native vegetation: Indian ricegrass, needleandthread, fourwing saltbush, galleta, Wyoming big sagebrush
Land capability subclass (irrigated): 2e
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 4 inches; sandy loam
4 to 60 inches; sandy loam

Minor Components

Yarts and similar soils
Composition: About 8 percent
Slope: 2 to 4 percent
Ecological site: Loamy Bottom (Basin Big Sagebrush)

Montwel and similar soils
Composition: About 7 percent

255—Clyl-Pinerid association, 8 to 40 percent slopes

Map Unit Setting

Major Land Resource Area: 47
Elevation: 7,500 to 9,000 feet (2,286 to 2,743 meters)
Mean annual precipitation: 16 to 22 inches (406 to 559 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Freeze-free period: 70 to 90 days
Note: This is a join unit from the Uintah Area, Utah soil survey area.

Map Unit Composition

Clyl and similar soils: 45 percent
Pinerid and similar soils: 40 percent
Minor components: 15 percent

Component Descriptions

Clyl soils

Landform: Mountain slopes
Parent material: Slope alluvium derived from dolomitic limestone
Slope: 15 to 40 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 4.3 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 60 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Stony Loam (Bitterbrush)
Potential native vegetation: antelope bitterbrush, needleandthread, bluebunch wheatgrass, Utah serviceberry, arrowleaf balsamroot, birchleaf mountain mahogany, bluegrass, tapertip hawksbeard
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 2 inches; channery silt loam
2 to 9 inches; channery silt loam
9 to 19 inches; very channery silt loam
19 to 29 inches; very channery loam
29 to 60 inches; extremely flaggy loam

Pinerid soils

Landform: Mountain slopes
Parent material: Slope alluvium derived from dolomitic limestone
Slope: 8 to 25 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 0.9 inch (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 60 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Windswept Ridge (Black Sagebrush)
Potential native vegetation: bluebunch wheatgrass, bluegrass, black sagebrush, prairie Junegrass, needleandthread, prairie sagewort
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 2 inches; very channery silt loam
2 to 6 inches; very channery silt loam
6 to 13 inches; extremely channery silt loam
13 to 17 inches; unweathered bedrock

Minor Components

Dokie and similar soils
Composition: About 5 percent

Bigtom and similar soils
Composition: About 5 percent

Rock outcrop
Composition: About 5 percent

256—Cortyzack-Diagulch complex, 3 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 47
Elevation: 7,300 to 7,700 feet (2,225 to 2,347 meters)
Mean annual precipitation: 16 to 22 inches (406 to 559 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Freeze-free period: 70 to 90 days
Note: This is a join unit from the Uintah Area, Utah soil survey area.

Map Unit Composition

Cortyzack and similar soils: 65 percent
Diagulch and similar soils: 20 percent
Minor components: 15 percent

Component Descriptions

Cortyzack soils

Landform: Hills
Position on landform: Shoulder
Parent material: Eolian deposits over slope alluvium derived from sandstone, limestone, shale, and quartzite
Slope: 3 to 25 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 9.9 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Medium
Calcium carbonate maximum: About 30 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam (Mountain Big Sagebrush)
Potential native vegetation: Columbia needlegrass, mountain big sagebrush, western wheatgrass, birchleaf mountain mahogany, bluegrass, Ross' sedge, arrowleaf balsamroot, needleandthread, prairie Junegrass, tapertip hawksbeard
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; loam
3 to 12 inches; clay loam
12 to 23 inches; clay loam
23 to 48 inches; clay loam
48 to 72 inches; loam
72 to 76 inches; loam

Diagulch soils

Landform: Hills
Position on landform: Shoulder

Parent material: Eolian deposits over slope alluvium derived from limestone and quartzite
Slope: 3 to 15 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 7.8 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 30 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam (Mountain Big Sagebrush)
Potential native vegetation: Columbia needlegrass, mountain big sagebrush, western wheatgrass, birchleaf mountain mahogany, bluegrass, Ross' sedge, arrowleaf balsamroot, needleandthread, prairie Junegrass, tapertip hawksbeard
Land capability subclass (nonirrigated): 4e

Typical Profile:
0 to 9 inches; loam
9 to 34 inches; loam
34 to 53 inches; sandy loam
53 to 60 inches; gravelly loamy sand

Minor Components

Iceslew and similar soils
Composition: About 5 percent
Landform: Flood plains

Chivers and similar soils
Composition: About 5 percent

Flynncove and similar soils
Composition: About 5 percent
Slope: 4 to 25 percent
Ecological site: Mountain Stony Loam (Bitterbrush)

257—Cortyzack-Duffymont complex, 3 to 25 percent slopes, rubbly

Map Unit Setting

Major Land Resource Area: 47
Elevation: 7,400 to 8,500 feet (2,256 to 2,591 meters)
Mean annual precipitation: 16 to 22 inches (406 to 559 millimeters)
Mean annual air temperature: 40 to 45 degrees F. (4.4 to 7.2 degrees C.)
Freeze-free period: 70 to 90 days
Note: This is a join unit from the Uintah Area, Utah soil survey area.

Map Unit Composition

Cortyzack and similar soils: 55 percent
Duffymont and similar soils: 30 percent
Minor components: 15 percent

Component Descriptions

Cortyzack soils

Landform: Hills
Position on landform: Shoulder
Parent material: Eolian deposits over slope alluvium derived from sandstone, limestone, shale, and quartzite
Slope: 3 to 25 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 9.9 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Medium
Calcium carbonate maximum: About 30 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam (Mountain Big Sagebrush)
Potential native vegetation: Columbia needlegrass, mountain big sagebrush, western wheatgrass, birchleaf mountain mahogany, bluegrass, Ross' sedge, arrowleaf balsamroot, needleandthread, prairie Junegrass, tapertip hawksbeard
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; loam
3 to 12 inches; clay loam
12 to 23 inches; clay loam
23 to 48 inches; clay loam
48 to 72 inches; loam
72 to 76 inches; loam

Duffymont soils

Landform: Hills
Position on landform: Summit, shoulder
Parent material: Slope alluvium derived from sandstone
Slope: 3 to 25 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Well drained

Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 1.0 inch (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Shallow Loam (Mountain Big Sagebrush)
Potential native vegetation: bluebunch wheatgrass, mountain big sagebrush, antelope bitterbrush, needleandthread, Indian ricegrass, Nevada bluegrass, Utah serviceberry, arrowleaf balsamroot, sheep fescue
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 13 inches; extremely flaggy fine sandy loam
13 to 17 inches; extremely flaggy sandy loam
17 to 21 inches; unweathered bedrock

Minor Components

Tosca and similar soils
Composition: About 5 percent

Rock outcrop
Composition: About 5 percent

Namlot and similar soils
Composition: About 5 percent

258—Cortyzack-Flynncove association, 3 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 47
Elevation: 6,800 to 7,600 feet (2,073 to 2,316 meters)
Mean annual precipitation: 16 to 22 inches (406 to 559 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Freeze-free period: 70 to 90 days
Note: This is a join unit from the Uintah Area, Utah soil survey area.

Map Unit Composition

Cortyzack and similar soils: 45 percent
Flynncove and similar soils: 45 percent
Minor components: 10 percent

Component Descriptions

Cortyzack soils

Landform: Hills
Position on landform: Shoulder
Parent material: Eolian deposits over slope alluvium derived from sandstone, limestone, shale, and quartzite
Slope: 3 to 25 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 9.9 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Medium
Calcium carbonate maximum: About 30 percent
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Loam (Mountain Big Sagebrush)
Potential native vegetation: Columbia needlegrass, mountain big sagebrush, western wheatgrass, birchleaf mountain mahogany, bluegrass, Ross' sedge, arrowleaf balsamroot, needleandthread, prairie Junegrass, tapertip hawksbeard
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 3 inches; loam
3 to 12 inches; clay loam
12 to 23 inches; clay loam
23 to 48 inches; clay loam
48 to 72 inches; loam
72 to 76 inches; loam

Flynncove soils

Landform: Fan remnants
Parent material: Slope alluvium derived from sandstone and quartzite
Slope: 4 to 25 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 3.8 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Stony Loam (Bitterbrush)

Potential native vegetation: antelope bitterbrush, needleandthread, bluebunch wheatgrass, mountain big sagebrush, Utah serviceberry, arrowleaf balsamroot, birchleaf mountain mahogany, bluegrass
Land capability subclass (nonirrigated): 6e

Typical Profile:
0 to 8 inches; cobbly loam
8 to 15 inches; cobbly sandy clay loam
15 to 37 inches; extremely cobbly sandy clay loam
37 to 60 inches; extremely cobbly sandy loam

Minor Components

Flynncove and similar soils
Composition: About 3 percent
Slope: 25 to 50 percent
Ecological site: Mountain Stony Loam (Browse)

Tridell and similar soils
Composition: About 3 percent
Slope: 4 to 25 percent
Ecological site: Upland Stony Loam (Black Sagebrush)

Iceslew and similar soils
Composition: About 2 percent
Landform: Flood plains

Hoymount and similar soils
Composition: About 2 percent

259—Denco-Gerst complex, 4 to 40 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,400 to 5,800 feet (1,646 to 1,768 meters)
Mean annual precipitation: 5 to 12 inches (127 to 305 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Freeze-free period: 110 to 140 days
Note: This is a join unit from the Uintah Area, Utah soil survey area.

Map Unit Composition

Denco and similar soils: 45 percent
Gerst and similar soils: 40 percent
Minor components: 15 percent

Component Descriptions

Denco soils

Landform: Hills
Parent material: Slope alluvium over residuum derived from shale
Slope: 4 to 25 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Available water capacity: About 6.0 inches (moderate)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 15 percent
Gypsum maximum: About 5 percent
Salinity maximum: About 4 mmhos/cm (very slightly saline)
Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Desert Clay (Shadscale)
Potential native vegetation: shadscale saltbush, bottlebrush squirreltail, bud sagebrush, saline wildrye, winterfat, Indian ricegrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 4 inches; silty clay loam
4 to 37 inches; silty clay
37 to 41 inches; weathered bedrock

Gerst soils

Landform: Hills
Parent material: Slope alluvium over residuum derived from shale and sandstone
Slope: 4 to 40 percent
Depth to restrictive feature: 6 to 20 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 1.8 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 40 percent
Gypsum maximum: About 1 percent
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Semidesert Shallow Loam (Utah Juniper-Pinyon)

Potential native vegetation:
Common trees: Utah juniper, twoneedle pinyon
Other plants: black sagebrush, saline wildrye, Mormon tea, bluebunch wheatgrass, galleta
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 2 inches; loam
2 to 12 inches; parachannery loam
12 to 22 inches; weathered bedrock

Minor Components

Mikim and similar soils
Composition: About 3 percent

Gerst and similar soils
Composition: About 3 percent
Slope: 4 to 25 percent
Ecological site: Semidesert Shallow Loam (Black Sagebrush)

Mespun and similar soils
Composition: About 3 percent

Badland
Composition: About 3 percent

Rock outcrop
Composition: About 3 percent

260—Dokie-Flynncove association, 25 to 50 percent slopes

Map Unit Setting

Major Land Resource Area: 47
Elevation: 8,000 to 9,000 feet (2,438 to 2,743 meters)
Mean annual precipitation: 16 to 28 inches (406 to 711 millimeters)
Mean annual air temperature: 38 to 43 degrees F. (3.3 to 6.1 degrees C.)
Freeze-free period: 50 to 90 days
Note: This is a join unit from the Uintah Area, Utah soil survey area.

Map Unit Composition

Dokie and similar soils: 70 percent
Flynncove and similar soils: 15 percent
Minor components: 15 percent

Component Descriptions

Dokie soils

Landform: Mountain slopes
Parent material: Slope alluvium and colluvium derived from sandstone and quartzite
Slope: 25 to 50 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 2.5 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: High Mountain Stony Loam (Douglas Fir)
Potential native vegetation:
Common trees: Rocky Mountain Douglas-fir
Other plants: mountain snowberry, Oregongrape, boxleaf myrtle, elk sedge, Woods' rose, bluegrass, heartleaf arnica, quaking aspen, slender wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 4 inches; slightly decomposed plant material
4 to 7 inches; extremely bouldery loam
7 to 16 inches; extremely bouldery loam
16 to 36 inches; extremely bouldery loam
36 to 64 inches; extremely bouldery sandy loam

Flynncove soils

Landform: Mountain slopes
Parent material: Slope alluvium and colluvium derived from sandstone and quartzite
Slope: 25 to 50 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 2.9 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)

Ecological site: Mountain Stony Loam (Browse)
Potential native vegetation: Utah serviceberry, birchleaf mountain mahogany, bluebunch wheatgrass, bluegrass, mountain big sagebrush, mountain snowberry, sedge
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 8 inches; extremely stony loam
8 to 13 inches; extremely stony sandy loam
13 to 40 inches; extremely stony sandy clay loam
40 to 60 inches; extremely stony sandy clay loam

Minor Components

Hoymount and similar soils
Composition: About 6 percent

Rock outcrop
Composition: About 5 percent

Namlot and similar soils
Composition: About 4 percent

261—Dokie-Namlot association, 15 to 70 percent slopes

Map Unit Setting

Major Land Resource Area: 47
Elevation: 7,600 to 9,000 feet (2,316 to 2,743 meters)
Mean annual precipitation: 16 to 28 inches (406 to 711 millimeters)
Mean annual air temperature: 38 to 43 degrees F. (3.3 to 6.1 degrees C.)
Freeze-free period: 50 to 90 days
Note: This is a join unit from the Uintah Area, Utah soil survey area.

Map Unit Composition

Dokie and similar soils: 50 percent
Namlot and similar soils: 40 percent
Minor components: 10 percent

Component Descriptions

Dokie soils

Landform: Mountain slopes
Parent material: Slope alluvium and colluvium derived from sandstone and quartzite
Slope: 50 to 70 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 2.5 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: High Mountain Very Steep Stony Loam (Douglas Fir)
Potential native vegetation:
Common trees: Rocky Mountain Douglas-fir
Other plants: mountain snowberry, birchleaf mountain mahogany, elk sedge, Oregongrape, Woods' rose, bluegrass, boxleaf myrtle, currant, heartleaf arnica, quaking aspen, slender wheatgrass
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 4 inches; slightly decomposed plant material
4 to 7 inches; extremely bouldery loam
7 to 16 inches; extremely bouldery loam
16 to 36 inches; extremely bouldery loam
36 to 64 inches; extremely bouldery sandy loam

Namlot soils

Landform: Mountain slopes
Parent material: Slope alluvium over residuum derived from sandstone
Slope: 15 to 40 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 0.9 inch (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Mountain Shallow Sandy Loam (Ponderosa Pine)
Potential native vegetation:
Common trees: ponderosa pine
Other plants: bluegrass, elk sedge, mountain big sagebrush, needleandthread, Indian ricegrass, Oregongrape, antelope bitterbrush, birchleaf mountain mahogany, mountain snowberry
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 3 inches; extremely cobbly sandy loam
3 to 7 inches; very cobbly sandy clay loam
7 to 17 inches; extremely cobbly sandy clay loam
17 to 21 inches; unweathered bedrock

Minor Components

Rock outcrop
Composition: About 3 percent

Hoymount and similar soils
Composition: About 3 percent

Bigtom and similar soils
Composition: About 2 percent

Loamy, very deep and similar soils
Composition: About 2 percent
Landform: Mountain slopes
Slope: 15 to 50 percent
Drainage class: Well drained
Ecological site: High Mountain Loam Aspen (Aspen)

262—Gompers very channery silt loam, 4 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 6,500 to 7,200 feet (1,981 to 2,195 meters)
Mean annual precipitation: 12 to 16 inches (305 to 406 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 90 to 110 days
Note: This is a join unit from the Uintah Area, Utah soil survey area.

Map Unit Composition

Gompers and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Gompers soils

Landform: Hills
Parent material: Slope alluvium over residuum derived from shale
Slope: 4 to 25 percent
Depth to restrictive feature: 8 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 1.2 inches (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Very high
Calcium carbonate maximum: About 30 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 10 (slightly sodic)
Ecological site: Upland Shallow Loam (Pinyon-Utah Juniper)
Potential native vegetation:
Common trees: Utah juniper, twoneedle pinyon
Other plants: birchleaf mountain mahogany, Indian ricegrass, Mormon tea, bluebunch wheatgrass, saline wildrye, Mexican cliffrose
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 3 inches; very channery silt loam
3 to 8 inches; very channery loam
8 to 18 inches; extremely channery loam
18 to 22 inches; unweathered bedrock

Minor Components

Whitesage and similar soils
Composition: About 3 percent
Slope: 4 to 8 percent
Ecological site: Upland Silt Loam (Fourwing Saltbush-Winterfat)

Bigpack and similar soils
Composition: About 3 percent
Slope: 2 to 8 percent
Ecological site: Upland Silt Loam (Fourwing Saltbush-Winterfat)

Walknolls and similar soils
Composition: About 3 percent
Slope: 4 to 25 percent
Ecological site: Semidesert Shallow Loam (Black Sagebrush)

Rock outcrop
Composition: About 3 percent

Splimo and similar soils
Composition: About 3 percent
Slope: 8 to 25 percent
Ecological site: Semidesert Shallow Loam (Black Sagebrush)

263—Hanksville silty clay loam, 2 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 4,800 to 6,100 feet (1,463 to 1,859 meters)
Mean annual precipitation: 5 to 8 inches (127 to 203 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Freeze-free period: 110 to 140 days
Note: This is a join unit from the Uintah Area, Utah soil survey area.

Map Unit Composition

Hanksville and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Hanksville soils

Landform: Hills
Parent material: Slope alluvium over residuum from shale
Slope: 2 to 25 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 4.7 inches (low)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 25 percent
Gypsum maximum: About 10 percent
Salinity maximum: About 16 mmhos/cm (moderately saline)
Sodium adsorption ratio maximum: About 13 (moderately sodic)
Ecological site: Desert Shallow Clay (Mat Saltbush)
Potential native vegetation: mat saltbush, galleta, Native American pipeweed, bud sagebrush
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 3 inches; silty clay loam
3 to 33 inches; silty clay
33 to 37 inches; weathered bedrock

Minor Components

Greybull and similar soils
Composition: About 5 percent

Uffens and similar soils
Composition: About 5 percent
Slope: 3 to 8 percent
Ecological site: Desert Alkali Bench (Castlevalley Saltbush)

Leeko and similar soils
Composition: About 5 percent

264—Mikim loam, 3 to 15 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,600 to 6,800 feet (1,707 to 2,073 meters)
Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Freeze-free period: 110 to 140 days
Note: This is a join unit from the Uintah Area, Utah soil survey area.

Map Unit Composition

Mikim and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Mikim soils

Landform: Alluvial fans
Parent material: Alluvium derived from sandstone, limestone, shale, and quartzite
Slope: 3 to 15 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 9.6 inches (high)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Medium
Calcium carbonate maximum: About 15 percent
Gypsum maximum: About 2 percent
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 10 (slightly sodic)
Ecological site: Semidesert Loam (Wyoming Big Sagebrush)
Potential native vegetation: Indian ricegrass, Wyoming big sagebrush, bottlebrush squirreltail, galleta, needleandthread, globemallow, winterfat
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 6 inches; loam
6 to 60 inches; loam

Minor Components

Clapper and similar soils
Composition: About 3 percent
Landform: Fan remnants
Slope: 2 to 25 percent
Ecological site: Semidesert Stony Loam (Utah Juniper-Pinyon)

Denco and similar soils
Composition: About 3 percent
Slope: 4 to 25 percent
Ecological site: Desert Clay (Shadscale)

Gilston and similar soils
Composition: About 3 percent

Hanksville and similar soils
Composition: About 3 percent
Slope: 2 to 25 percent
Ecological site: Desert Shallow Clay (Mat Saltbush)

Walknolls and similar soils
Composition: About 3 percent
Slope: 4 to 25 percent
Ecological site: Semidesert Shallow Loam (Utah Juniper-Pinyon)

265—Mikim silt loam, sodic, 1 to 4 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,400 to 6,600 feet (1,646 to 2,012 meters)
Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Freeze-free period: 110 to 140 days
Note: This is a join unit from the Uintah Area, Utah soil survey area.

Map Unit Composition

Mikim and similar soils: 85 percent
Minor components: 15 percent

Component Descriptions

Mikim soils

Landform: Alluvial flats
Parent material: Alluvium derived from sandstone, limestone, shale, and quartzite
Slope: 1 to 4 percent
Drainage class: Well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Available water capacity: About 8.9 inches (moderate)
Shrink-swell potential: About 4.5 percent (moderate)
Runoff class: Low
Calcium carbonate maximum: About 10 percent
Gypsum maximum: About 2 percent
Salinity maximum: About 8 mmhos/cm (slightly saline)
Sodium adsorption ratio maximum: About 15 (moderately sodic)
Ecological site: Alkali Flat (Black Greasewood)
Potential native vegetation: greasewood, alkali sacaton, bottlebrush squirreltail, shadscale saltbush, Indian ricegrass, galleta, seepweed
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 6 inches; silt loam
6 to 60 inches; stratified sandy loam to clay loam

Minor Components

Yarts and similar soils
Composition: About 5 percent
Slope: 2 to 5 percent
Ecological site: Loamy Bottom (Basin Big Sagebrush)

Gilston and similar soils
Composition: About 5 percent

Yarts and similar soils
Composition: About 5 percent
Slope: 2 to 5 percent
Ecological site: Alkali Flat (Black Greasewood)

266—Rock outcrop-Boxring-Tridell complex, 10 to 50 percent slopes

Map Unit Setting

Major Land Resource Area: 47

Elevation: 6,000 to 7,000 feet (1,829 to 2,134 meters)
Mean annual precipitation: 12 to 16 inches (305 to 406 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 90 to 110 days
Note: This is a join unit from the Uintah Area, Utah soil survey area.

Map Unit Composition

Rock outcrop: 40 percent
Boxring and similar soils: 25 percent
Tridell and similar soils: 25 percent
Minor components: 10 percent

Component Descriptions

Rock outcrop

Description: Rock outcrop consists of strongly sloping to steep exposures of bare bedrock associated with shale, siltstone, sandstone, limestone, and quartzite of the Browns Park, Duchesne River, and Park City formations. Local relief generally ranges from 2 to 1,000 feet. Potential runoff is very high.
Landform: Cliffs, erosion remnants, escarpments, ledges
Slope: 10 to 50 percent
Depth to restrictive feature: 0 inches to bedrock (lithic)
Available water capacity: About 0.0 inches (very low)
Runoff class: Very high
Land capability subclass (nonirrigated): 8

Boxring soils

Landform: Mountain slopes
Parent material: Slope alluvium derived from sandstone
Slope: 10 to 25 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 0.6 inch (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: None
Gypsum maximum: None
Salinity maximum: About 0 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Upland Shallow Loam (Pinyon-Utah Juniper)
Potential native vegetation:
Common trees: Utah juniper, twoneedle pinyon
Other plants: bluebunch wheatgrass, black sagebrush, prairie Junegrass, bluegrass, needleandthread, stemless goldenweed
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 6 inches; extremely stony sandy loam
6 to 14 inches; extremely cobbly sandy clay loam
14 to 18 inches; unweathered bedrock

Tridell soils

Landform: Hills
Parent material: Slope alluvium and colluvium derived from sandstone, limestone, shale, and quartzite
Slope: 25 to 50 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 4.1 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 40 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Upland Stony Loam (Pinyon-Utah Juniper)
Potential native vegetation:
Common trees: Utah juniper, twoneedle pinyon
Other plants: black sagebrush, birchleaf mountain mahogany, bluebunch wheatgrass, Indian ricegrass, Mormon tea, needleandthread, prairie Junegrass, slender buckwheat
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 2 inches; extremely cobbly loam
2 to 8 inches; very gravelly loam
8 to 37 inches; very cobbly loam
37 to 60 inches; extremely cobbly loam

Minor Components

Whitesage and similar soils
Composition: About 4 percent

Slope: 8 to 25 percent
Ecological site: Upland Loam (Mountain Big Sagebrush)

Wildmount and similar soils
Composition: About 3 percent

Flynncove and similar soils
Composition: About 3 percent
Slope: 4 to 25 percent
Ecological site: Mountain Stony Loam (Bitterbrush)

267—Solirec-Abracon-Begay complex, 2 to 15 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,300 to 6,600 feet (1,615 to 2,012 meters)
Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Freeze-free period: 110 to 140 days
Note: This is a join unit from the Uintah Area, Utah soil survey area.

Map Unit Composition

Solirec and similar soils: 35 percent
Abracon and similar soils: 30 percent
Begay and similar soils: 20 percent
Minor components: 15 percent

Component Descriptions

Solirec soils

Landform: Fan remnants
Parent material: Eolian deposits over slope alluvium derived from sandstone and shale
Slope: 3 to 8 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 10.6 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 35 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 5 (slightly sodic)
Ecological site: Semidesert Loam (Wyoming Big Sagebrush)
Potential native vegetation: Indian ricegrass, Wyoming big sagebrush, bottlebrush squirreltail, galleta, needleandthread, globemallow, winterfat
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 4 inches; fine sandy loam
4 to 12 inches; sandy clay loam
12 to 19 inches; loam
19 to 75 inches; clay loam

Abracon soils

Landform: Fan remnants
Parent material: Slope alluvium derived from sandstone, limestone, shale, and quartzite
Slope: 3 to 8 percent
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 9.4 inches (high)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 40 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 10 (slightly sodic)
Ecological site: Semidesert Loam (Wyoming Big Sagebrush)
Potential native vegetation: Indian ricegrass, Wyoming big sagebrush, bottlebrush squirreltail, galleta, needleandthread, globemallow, winterfat
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 2 inches; loam
2 to 16 inches; loam
16 to 51 inches; loam
51 to 60 inches; loam

Begay soils

Landform: Fan remnants
Parent material: Eolian deposits over alluvium derived from sandstone
Slope: 2 to 15 percent
Drainage class: Well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 7.1 inches (moderate)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 5 percent
Gypsum maximum: About 2 percent

Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 10 (slightly sodic)
Ecological site: Semidesert Sandy Loam (Fourwing Saltbush)
Potential native vegetation: Indian ricegrass, needleandthread, fourwing saltbush, galleta, Wyoming big sagebrush
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 4 inches; sandy loam
4 to 12 inches; sandy loam
12 to 37 inches; sandy loam
37 to 60 inches; sandy loam

Minor Components

Nolava and similar soils
Composition: About 8 percent
Slope: 2 to 4 percent

Gerst and similar soils
Composition: About 3 percent
Slope: 4 to 25 percent
Ecological site: Semidesert Shallow Loam (Black Sagebrush)

Mespun and similar soils
Composition: About 3 percent

Badland
Composition: About 1 percent

268—Toliver-Rock outcrop association, 50 to 80 percent slopes

Map Unit Setting

Major Land Resource Area: 34, 47
Elevation: 6,500 to 7,800 feet (1,981 to 2,377 meters)
Mean annual precipitation: 12 to 16 inches (305 to 406 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Freeze-free period: 90 to 110 days
Note: This is a join unit from the Uintah Area, Utah soil survey area.

Map Unit Composition

Toliver and similar soils: 55 percent
Rock outcrop: 30 percent
Minor components: 15 percent

Component Descriptions

Toliver soils

Landform: Hills
Parent material: Loamy-skeletal colluvium derived from sandstone
Slope: 50 to 80 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 4.8 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 10 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 0 (nonsodic)
Ecological site: Upland Very Steep Stony Loam (Pinyon-Utah Juniper)
Potential native vegetation: birchleaf mountain mahogany, black sagebrush, Indian ricegrass, Mormon tea, Utah juniper, antelope bitterbrush, bluebunch wheatgrass, needleandthread, twoneedle pinyon
Land capability subclass (nonirrigated): 8

Typical Profile:
0 to 7 inches; extremely flaggy fine sandy loam
7 to 19 inches; channery fine sandy loam
19 to 59 inches; very flaggy fine sandy loam
59 to 63 inches; unweathered bedrock

Rock outcrop

Description: Rock outcrop consists of very steep exposures of bare bedrock associated with shale, siltstone, sandstone, limestone and quartzite of the Browns Park and Duchesne River formations. Local relief generally ranges from 2 to 1,000 feet. Potential runoff is very high.
Landform: Cliffs, erosion remnants, escarpments, ledges
Slope: 50 to 80 percent
Depth to restrictive feature: 0 inches to bedrock (lithic)
Available water capacity: About 0.0 inches (very low)

Runoff class: Very high
Land capability subclass (nonirrigated): 8

Minor Components

Gompers and similar soils
Composition: About 8 percent
Slope: 50 to 80 percent
Ecological site: Upland Very Steep Shallow Loam (Pinyon-Utah Juniper)

Wildmount and similar soils
Composition: About 7 percent
Landform: Hills
Position on landform: Backslope
Slope: 40 to 60 percent
Drainage class: Well drained
Ecological site: Upland Stony Loam (Pinyon-Utah Juniper)

269—Walknolls-Badland-Rock outcrop complex, 25 to 50 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,200 to 6,800 feet (1,585 to 2,073 meters)
Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Freeze-free period: 110 to 140 days
Note: This is a join unit from the Uintah Area, Utah soil survey area.

Map Unit Composition

Walknolls and similar soils: 60 percent
Badland: 15 percent
Rock outcrop: 10 percent
Minor components: 15 percent

Component Descriptions

Walknolls soils

Landform: Hills
Parent material: Slope alluvium and colluvium derived from sandstone
Slope: 25 to 50 percent
Depth to restrictive feature: 8 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 0.6 inch (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: High
Calcium carbonate maximum: About 30 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 10 (slightly sodic)
Ecological site: Semidesert Shallow Loam (Utah Juniper-Pinyon)
Potential native vegetation:
Common trees: Utah juniper, twoneedle pinyon
Other plants: black sagebrush, saline wildrye, Mormon tea, bluebunch wheatgrass, galleta
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 2 inches; extremely channery sandy loam
2 to 7 inches; very channery sandy loam
7 to 14 inches; extremely channery sandy loam
14 to 18 inches; unweathered bedrock

Badland

Description: Badland consists of steep barren land that is dissected by many intermittent drainage channels. Badlands are associated with soft geologic materials of the Duchesne River, Green River, Mancos, and Uinta formations. Local relief generally ranges from 10 to 1,000 feet. Potential runoff is very high and erosion is active.
Landform: Erosion remnants, hills, ridges
Slope: 25 to 50 percent
Depth to restrictive feature: 0 to 2 inches to bedrock (paralithic)
Drainage class: Somewhat excessively drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Available water capacity: About 0.1 inch (very low)
Shrink-swell potential: About 7.5 percent (high)
Runoff class: Very high
Calcium carbonate maximum: About 15 percent
Gypsum maximum: About 10 percent
Salinity maximum: About 20 mmhos/cm (strongly saline)
Sodium adsorption ratio maximum: About 30 (strongly sodic)
Land capability subclass (nonirrigated): 8

Rock outcrop

Description: Rock outcrop consists of steep exposures of bare bedrock associated with shale, siltstone, sandstone and limestone of the Duchesne River, Green River and Uinta formations. Local relief generally ranges from 2 to 1,000 feet. Potential runoff is very high.

Landform: Cliffs, erosion remnants, escarpments, ledges
Slope: 25 to 50 percent
Depth to restrictive feature: 0 inches to bedrock (lithic)
Available water capacity: About 0.0 inches (very low)
Runoff class: Very high
Land capability subclass (nonirrigated): 8

Minor Components

Pherson and similar soils
Composition: About 3 percent

Hickerson and similar soils
Composition: About 3 percent

Mikim and similar soils
Composition: About 3 percent
Slope: 3 to 15 percent
Ecological site: Semidesert Loam (Wyoming Big Sagebrush)

Yarts and similar soils
Composition: About 3 percent
Slope: 2 to 5 percent
Ecological site: Alkali Flat (Black Greasewood)

Mespun and similar soils
Composition: About 3 percent

270—Walknolls-Gilston association, 2 to 25 percent slopes

Map Unit Setting

Major Land Resource Area: 34
Elevation: 5,300 to 5,900 feet (1,615 to 1,798 meters)
Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Freeze-free period: 110 to 140 days
Note: This is a join unit from the Uintah Area, Utah soil survey area.

Map Unit Composition

Walknolls and similar soils: 55 percent
Gilston and similar soils: 35 percent
Minor components: 10 percent

Component Descriptions

Walknolls soils

Landform: Hills
Parent material: Slope alluvium derived from sandstone
Slope: 4 to 25 percent
Depth to restrictive feature: 8 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Available water capacity: About 0.9 inch (very low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Medium
Calcium carbonate maximum: About 30 percent
Gypsum maximum: None
Salinity maximum: About 2 mmhos/cm (nonsaline)
Sodium adsorption ratio maximum: About 10 (slightly sodic)
Ecological site: Semidesert Shallow Loam (Wyoming Big Sagebrush)
Potential native vegetation: Wyoming big sagebrush, Indian ricegrass, bluegrass, shadscale saltbush, bluebunch wheatgrass, yellow rabbitbrush
Land capability subclass (nonirrigated): 7s

Typical Profile:
0 to 3 inches; very channery loam
3 to 7 inches; very channery loam
7 to 16 inches; extremely channery sandy loam
16 to 20 inches; unweathered bedrock

Gilston soils

Landform: Drainageways
Parent material: Alluvium derived from sandstone
Slope: 2 to 8 percent
Drainage class: Well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Available water capacity: About 5.8 inches (low)
Shrink-swell potential: About 1.5 percent (low)
Runoff class: Low
Calcium carbonate maximum: About 20 percent
Gypsum maximum: About 40 percent
Salinity maximum: About 16 mmhos/cm (moderately saline)
Sodium adsorption ratio maximum: About 55 (strongly sodic)

Ecological site: Semidesert Gravelly Sandy Loam (Wyoming Big Sagebrush)
Potential native vegetation: Wyoming big sagebrush, rubber rabbitbrush, spiny hopsage, Indian ricegrass, bluegrass, bottlebrush squirreltail, horsebrush, shadscale saltbush
Land capability subclass (nonirrigated): 7e

Typical Profile:
0 to 4 inches; sandy loam
4 to 52 inches; gravelly sandy loam
52 to 68 inches; gypsiferous loam

Minor Components

Rock outcrop
Composition: About 4 percent

Lanver and similar soils
Composition: About 3 percent

Pherson and similar soils
Composition: About 3 percent

271—Water

Map Unit Setting

Major Land Resource Area: 47, 34

Map Unit Composition

Water: 95 percent
Minor components: 5 percent

Component Descriptions

Water

Minor Components

Aquolls and similar soils
Composition: About 5 percent
Landform: Marshes

Use and Management of the Soils

This soil survey is an inventory and evaluation of the soils in the survey area. It can be used to adjust land uses to the limitations and potentials of natural resources and the environment. Also, it can help to prevent soil-related failures in land uses.

In preparing a soil survey, soil scientists, conservationists, engineers, and others collect extensive field data about the nature and behavioral characteristics of the soils. They collect data on erosion, droughtiness, flooding, and other factors that affect various soil uses and management. Field experience and collected data on soil properties and performance are used as a basis in predicting soil behavior.

Information in this section can be used to plan the use and management of soils for crops and pasture; as rangeland and forestland; as sites for buildings, sanitary facilities, mine reclamation, highways and other transportation systems, and parks and other recreational facilities; for agricultural waste management; and as wildlife habitat. It can be used to identify the potentials and limitations of each soil for specific land uses and to help prevent construction failures caused by unfavorable soil properties.

Planners and others using soil survey information can evaluate the effect of specific land uses on productivity and on the environment in all or part of the survey area. The survey can help planners to maintain or create a land use pattern in harmony with the natural soil.

Contractors can use this survey to locate sources of sand and gravel, roadfill, and topsoil. They can use it to identify areas where bedrock, wetness, or very firm soil layers can cause difficulty in excavation.

Health officials, highway officials, engineers, and others may also find this survey useful. The survey can help them plan the safe disposal of wastes and locate sites for pavements, sidewalks, campgrounds, playgrounds, lawns, and trees and shrubs.

Interpretive Ratings

The interpretive tables in this survey rate the soils in the survey area for various uses. Many of the tables identify the limitations that affect specified uses and indicate the severity of those limitations. The ratings in these tables are both verbal and numerical.

Rating Class Terms

Rating classes are expressed in the tables in terms that indicate the extent to which the soils are limited by all of the soil features that affect a specified use or in terms that indicate the suitability of the soils for the use. Thus, the tables may show limitation classes or suitability classes. Terms for the limitation classes are *not limited, somewhat limited,* and *very limited*. The suitability ratings are expressed as *well suited, moderately suited, poorly suited,* and *unsuited* or as *good, fair,* and *poor*.

Numerical Ratings

Numerical ratings in the tables indicate the relative severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use and the point at which the soil feature is not a limitation. The limitations appear in order from the most limiting to the least limiting. Thus, if more than one limitation is identified, the most severe limitation is listed first and the least severe one is listed last.

Crops and Pasture

Prepared by Charles A. Holcomb, Area Agronomist, Natural Resources Conservation Service.

General management necessary for crops and pasture is suggested in this section. The estimated yields of the main crops and pasture plants are listed, the system of land capability classification used by the Natural Resources Conservation Service is explained, and prime farmland is described.

Planners of management systems for individual fields or farms should consider the detailed information given in the description of each soil under the heading “Detailed Soil Map Units.” Specific information can be obtained from the local office of the Natural Resources Conservation Service or the

Cooperative Extension Service of Colorado State University.

Only a small percentage of the survey area is used for crops and pasture. The short growing season limits the types of nonirrigated and irrigated crops that can be grown. Because of low precipitation, a large portion of the survey area is unsuited to nonirrigated crops. Most of the nonirrigated cropland occurs in the eastern part of the survey area. Irrigation water generally is only available to areas along major streams and rivers.

Soil erosion is a major concern for all the soils in the area, with the highest hazard of erosion usually occurring on nonirrigated cropland. Productivity of the soils is substantially reduced when the surface layer is removed by soil erosion.

Wheat is the principal nonirrigated crop grown in the areas suited to nonirrigated crops. Because of limited precipitation, a crop-fallow system is most suitable. Yields vary, but are highest when the soils are under a high level of management to maximize residue and soil moisture through minimum tillage practices. Crops respond to fertilization with nitrogen and phosphorous.

Controlling soil blowing and water erosion are the main management concerns in areas of nonirrigated cropland. The hazard of soil blowing is moderate in most areas of the nonirrigated cropland. Water erosion is a major concern due to the snowmelt and rains in the spring. The risk of erosion can be reduced by leaving adequate quantities of crop residue on the surface through conservation tillage during the critical erosion periods. Surface residue helps to protect fallowed soils from erosion and allows the soils to more readily absorb and retain moisture. The risk of water erosion can also be reduced by contour farming, cross-slope farming, grassed waterway, diversions, and contour or field stripcropping. Tillage on wet soils should be avoided to prevent soil compaction. Chiseling and subsoiling helps to break up the plowpan and improves the water intake rate. Grass waterways are especially necessary in areas of concentrated waterflow to reduce gully erosion. Soils with slopes greater than 10 percent are not suitable for cultivated crops due to the hazard of water erosion. These areas are best suited to pasture or hay crops where a permanent plant cover is maintained.

Using irrigated water efficiently and distributing it uniformly, protecting the soils from erosion, and maintaining soil fertility are the main management objectives on irrigated cropland. The length of runs, width of sets, amount and duration of flow, and the frequency of irrigation all should be considered. Land leveling may be necessary on some areas to permit more uniform applications of water and to reduce runoff.

The border and sprinkler irrigation methods are suited to areas that have slopes of 0 to 3 percent. The areas that have slopes greater than 3 percent are suited to the sprinkler and ditch methods of irrigation, if the ditches are placed on the contour. Legumes, applications of manure, and commercial fertilizers containing nitrogen and phosphorous are very important in maintaining the fertility of all the irrigated soils. Timely and controlled applications of irrigation water are important to avoid long periods of soil saturation, increased hazard of water erosion, leaching of nutrients, and possible ground water contamination. Drainage is not a major concern on most soils used for irrigated hay production; it may be a problem in very localized areas or if crops other than grass hay are to be grown on soils with a high water table.

Management practices suitable for irrigated pasture consisting of alfalfa and grasses include deferring grazing on wet soils to avoid soil compaction and rotation grazing to avoid overgrazing. Management practices such as pasture and hayland management, cross-fencing, proper distribution of stock watering facilities, and salt locations help to maintain production of irrigated pasture.

Proper timing and rates of applications of pesticides and fertilizers should be managed to reduce surface and ground water contamination. The selection of fertilizers should be determined by a soil analysis. Pesticide applications should only be made after an integrated pest management analysis. This analysis involves checking the fields for the numbers, types, and growth stages of the pests, as well as an economic analysis on the application of pesticides to control the pest compared to other alternatives. Economic and environmental considerations should be used throughout the decision process to both maximize profit and protect water quality.

Yields per Acre

The average yields per acre that can be expected of the principal crops under a high level of management are shown in Table 5. In any given year, yields may be higher or lower than those indicated in the table because of variations in rainfall and other climatic factors. The land capability classification of map units in the survey area also is shown in the table.

The yields are based mainly on the experience and records of farmers, conservationists, and extension agents. Available yield data from nearby

counties and results of field trials and demonstrations also are considered.

The management necessary to obtain the indicated yields of the various crops depends on the kind of soil and the crop. Management can include drainage, erosion control, and protection from flooding; the proper planting and seeding rates; suitable high-yielding crop varieties; appropriate and timely tillage; control of weeds, plant diseases, and harmful insects; favorable soil reaction and optimum levels of nitrogen, phosphorus, potassium, and trace elements for each crop; effective use of crop residue, barnyard manure, and green manure crops; and harvesting that ensures the smallest possible loss.

For yields of irrigated crops, it is assumed that the irrigation system is adapted to the soils and to the crops grown, that good-quality irrigation water is uniformly applied as necessary, and that tillage is kept to a minimum.

The estimated yields reflect the productive capacity of each soil for each of the principal crops. Yields are likely to increase as new production technology and crop varieties are developed. The productivity of a given soil compared with that of other soils, however, is not likely to change.

Crops other than those shown in Table 5 are grown in the survey area, but estimated yields are not listed because the acreage of such crops is small. The local office of the Natural Resources Conservation Service or of the Cooperative Extension Service can provide information about the management and productivity of the soils for those crops.

Land Capability Classification

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops (USDA, 1961). Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations designed to show suitability and limitations of groups of soils for rangeland, for forestland, or for engineering purposes.

In the capability system, soils generally are grouped at three levels—capability class, subclass, and unit.

Capability classes, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

Class 1 soils have slight limitations that restrict their use.

Class 2 soils have moderate limitations that restrict the choice of plants or that require moderate conservation practices.

Class 3 soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both.

Class 4 soils have very severe limitations that restrict the choice of plants or that require very careful management, or both.

Class 5 soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.

Class 8 soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes.

Capability subclasses are soil groups within one class. They are designated by adding a small letter, *e, w, s,* or *c,* to the class numeral, for example, 2e. The letter *e* shows that the main hazard is the risk of erosion unless close-growing plant cover is maintained; *w* shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); *s* shows that the soil is limited mainly because it is shallow, droughty, or stony; and *c,* used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry.

In class 1 there are no subclasses because the soils of this class have few limitations. Class 5 contains only the subclasses indicated by *w, s,* or *c* because the soils in class 5 are subject to little or no erosion. They have other limitations that restrict their use to pasture, rangeland, forestland, wildlife habitat, or recreation.

Prime Farmland

Prime farmland is one of several kinds of important farmland defined by the U.S. Department of Agriculture. It is of major importance in meeting the Nation's short- and long-range needs for food and fiber. Because the supply of high-quality farmland is limited, the U.S. Department of Agriculture recognizes that responsible levels of government, as well as individuals, should encourage and facilitate the wise use of our Nation's prime farmland.

Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas. The soil qualities, growing season, and moisture supply are those necessary for the soil to economically produce sustained high yields of crops when proper management, including water management, and acceptable farming methods are applied. In general, prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, an acceptable salt and sodium content, and few or no rocks. It is permeable to water and air. It is not excessively erodible or saturated with water for long periods, and it either is not frequently flooded during the growing season or is protected from flooding. Slope ranges mainly from 0 to 6 percent. More detailed information about the criteria for prime farmland is available at the local office of the Natural Resources Conservation Service.

About 88,877 acres, or about 3 percent of the survey area, would meet the requirements for prime farmland if an adequate and dependable supply of irrigation water were available. Most of these areas occur along the major rivers and streams.

A recent trend in land use in some parts of the survey area has been the loss of some prime farmland to industrial and urban uses. The loss of prime farmland to other uses puts pressure on marginal lands, which generally are more erodible, droughty, and less productive and cannot be easily cultivated.

The map units in the survey area that are considered prime farmland are listed in Table 6. This list does not constitute a recommendation for a particular land use. On some soils included in the list, measures that overcome a hazard or limitation, such as flooding, wetness, and droughtiness, are necessary. Onsite evaluation is necessary to determine whether or not the hazard or limitation has been overcome by corrective measures. The extent of each listed map unit is shown in Table 4. The location is shown on the detailed soil maps. The soil qualities that affect use and management are described under the heading "Detailed Soil Map Units."

Ecological Sites and Characteristic Native Vegetation

In areas that have similar climate and topography, differences in the kind and amount of vegetation produced on the land are closely related to the kind of soil. Effective management is based upon the relationship between the soils and vegetation and water.

Table 7 shows, for each soil that supports native vegetation, the ecological site, the potential annual production of vegetation in favorable, normal, and unfavorable years, species and percent composition, common trees, and site index. This table includes both rangeland and forestland ecological sites. An explanation of the column headings in Table 7 follows.

An *ecological site* is the product of all the environmental factors responsible for its development. It has characteristic soils that have developed over time throughout the soil development process; a characteristic hydrology, particularly infiltration and runoff, that has developed over time; and a characteristic plant community (kind and amount of vegetation). The hydrology of a site is influenced by development of the soil and plant community. The vegetation, soils, and hydrology are all interrelated. Each is influenced by the others and influences the development of the others. The plant community on an ecological site is typified by an association of species that differs from that of other ecological sites in the kind and/or proportion of species or in total production. Descriptions of ecological sites are provided in the Field Office Technical Guide, which is available in local offices of the Natural Resources Conservation Service.

Total dry-weight production is the amount of vegetation that can be expected to grow annually on well managed rangeland that is supporting the potential natural plant community. It includes all vegetation, whether or not it is palatable to grazing animals. It includes the current year's growth of leaves, twigs, and fruits of woody plants. It does not include the increase in stem diameter of trees and shrubs. It is expressed in pounds per acre of air-dry vegetation for favorable, normal, and unfavorable years. In a favorable year, the amount and distribution

of precipitation and the temperatures make growing conditions substantially better than average. In a normal year, growing conditions are about average. In an unfavorable year, growing conditions are well below average, generally because of low available soil moisture. Yields are adjusted to a common percent of air-dry moisture content.

Range management requires a knowledge of the kinds of soil and of the potential natural plant community. It also requires an evaluation of the present range similarity index and rangeland trend. Range similarity index is determined by comparing the present plant community with the potential natural plant community on a particular rangeland ecological site. The more closely the existing community resembles the potential community, the higher the range similarity index. Rangeland trend is defined as the direction of change in an existing plant community relative to the potential natural plant community. Further information about the range similarity index and rangeland trend is available in chapter 4 of the "National Range and Pasture Handbook," which is available in local offices of the Natural Resources Conservation Service.

The objective in range management is to control grazing so that the plants growing on a site are about the same in kind and amount as the potential natural plant community for that site. Such management generally results in the optimum production of vegetation, control of undesirable brush species, conservation of water, and control of erosion. Sometimes, however, an area with a range similarity index somewhat below the potential meets grazing needs, provides wildlife habitat, and protects soil and water resources.

Characteristics native vegetation identifies, for each soil, the plant species that make up most of the potential natural plant community. The plants are listed by common name.

Composition is the expected percentage of the total annual production for each species in the potential natural plant community. *Forest* is the percent composition of the vegetation in the forest understory. *Range* is the percent composition of the vegetation in the rangeland community.

Common trees identifies those trees that are commonly found on the soil. The list of common trees can be used by forest managers in planning for the use and management of soils for wood production. These trees are preferred for planting, seeding, or natural regeneration and those that remain in the stand after thinning or partial harvest.

Site index is an expression of the potential productivity of common trees on a soil.

Rangeland

Jim Kellogg and Stephen Myers, Range Conservationists, Natural Resources Conservation Service, helped to prepare this section.

About 84 percent of the survey area is rangeland on which the predominant native vegetation is shrubs, with grasses and forbs that are suitable for grazing. Approximately 77 percent of agricultural income in the survey area is derived from the livestock industry.

The principal livestock operations in the survey area are cow-calf and ewe-lamb with some yearling operations . The ranches in the survey area average 1,985 acres of privately owned land in addition to land leased from the U.S. Forest Service, the State of Colorado, and the Bureau of Land Management.

Cattle graze on privately owned land during the spring and fall months. During the summer months, cattle graze on the public lands at higher elevations; in the winter months on public and private lands, and their diet is supplemented with hay.

Sheep graze on public lands throughout the year. During the spring, sheep are herded toward higher elevations where they graze throughout the summer and early fall. The procedure is then reversed, with the herd moving to lower areas where they will graze until spring. This winter range is free from deep snow accumulation, which makes browse more readily available.

Several conservation practices are suitable for use on rangeland in the survey area. These include proper grazing use, a planned grazing system, range seeding, and brush management. Proper grazing use is grazing at an intensity that will maintain or improve the quality and quantity of desirable vegetations. This is achieved when at least 50 percent of the annual production, by weight, remains at the end of the growing season. The object of a planned grazing system is to graze pastures during different seasons of the year over a period of years. Flexibility in livestock and wildlife numbers, as well as the frequency and intensity of grazing, is essential to the success of any system. A grazing system will improve the efficiency of livestock grazing through a uniform use of all grazing units. Distribution of watering facilities and salt, in conjunction with fencing or herding, will further increase uniform use of the grazing units.

If undesirable shrubs have become dominant in the plant community, and are competing with desirable forage plants, brush management should be considered. Caution should be exercised when manipulating or reducing brush so that adequate

cover is retained on steep slopes preventing soil erosion, critical winter range for wildlife is not destroyed, and enough grass remains to cover the ground and keep soil in place. If the range is severely deteriorated, seeding is the fastest, most economical method of revegetation.

Shallow or stony soils and steep slopes generally are not suited to seeding. Species that are used in seeding should meet the seasonal needs of livestock and wildlife.

Aspen Woodland Site

The annual precipitation is approximately 20 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Slender wheatgrass, nodding bromegrass, blue wildrye, Columbia needlegrass, silvery lupine, American vetch, and aspen peavine make up most of the potential plant community of this site. Mountain snowberry, Saskatoon serviceberry, and chokecherry are the main shrubs.

The total potential annual production, air-dry weight, of the understory of this plant community ranges from 4,000 pounds per acre, in years of favorable growth conditions, to 1,500 pounds per acre in years of below average growing conditions. About 15 percent of the yield can be used as forage and browse for cattle, and about 30 percent for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial plants, especially nodding bromegrass, slender wheatgrass, and blue wildrye; while overgrazing increases Columbia needlegrass, mountain snowberry, and other common shrubs.

This site is quite stable due to the cool temperatures and relatively high precipitation. Therefore, seeding usually is not necessary. If the condition should be improved, the site generally responds very well to proper grazing use, a planned grazing system, and deferment from grazing by domestic animals.

Alkali Upland #418 Range Site

The annual precipitation is approximately 10 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Western wheatgrass, Indian ricegrass, thickspike wheatgrass, streambank wheatgrass, Nevada bluegrass, Gardner saltbush, and winterfat make up most of the annual production in the potential plant community of this site. Other grasses in the survey area include Sandberg bluegrass, needleandthread, bluebunch wheatgrass, and bottlebrush squirreltail. The major forbs are fernleaf biscuitroot, Hoods phlox, stemless spring parsley, rose pussytoes, and tapertip onion. Greenmolly summercypress, shadscale, mat saltbush, birdfoot sagebrush, bud sagebrush, fringed sagebrush, Nuttall horsebrush, plains pricklypear, slenderbush eriogonum, woody aster, and Wyoming big sagebrush are the main shrubs in the community.

The total potential annual production, air-dry weight, of this plant community ranges from 700 pounds per acre in years of favorable growth conditions to 300 pounds per acre in years of below average growing conditions. About 30 percent of the yield can be used as forage and browse for cattle, and about 40 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial plants, especially bluebunch wheatgrass, Indian ricegrass, needleandthread, Nevada bluegrass, and western wheatgrass, and increases Gardner saltbush, forbs, mat saltbush, woody aster, Wyoming big sagebrush, and the common shrubs. Plants that commonly invade the site include halogeton, curled dock, Russian thistle, and perfoliated pepperweed.

Care should be exercised so this site is not overgrazed because it is very fragile This can be difficult because it is intermixed with other, more productive sites. Proper grazing use and a planned grazing system will prevent deterioration of the site condition.

Alkaline Slopes #295 Range Site

The annual precipitation is approximately 12 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Western wheatgrass, thickspike wheatgrass, streambank wheatgrass, muttongrass, Indian ricegrass, Wyoming big sagebrush, and black greasewood make up most of the annual production in the potential plant community of this site. Other grasses in the survey area include bluebunch wheatgrass, bottlebrush squirreltail, Sandberg bluegrass, and Nevada bluegrass. The major forbs are tapertip onion, Hoods phlox, and hollyleaf clover. Winterfat, low rabbitbrush, plains pricklypear, and Gardner saltbush are less abundant shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 800 pounds per acre in years of favorable growth conditions to 400 pounds per acre in years of below average growing conditions. About 20 percent of the yield can be used as forage and browse for cattle, and about 35 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial grasses, especially

western wheatgrass, bluebunch wheatgrass, muttongrass, Nevada bluegrass, Indian ricegrass, and winterfat, and increases Hoods phlox, buckwheat, Wyoming big sagebrush, black greasewood, and other shrubs. Plants that commonly invade the site include Russian thistle, mustard, Russian knapweed, pinyon, and juniper.

Proper grazing management and a planned grazing system are necessary to maintain plant vigor and to prevent this site from deteriorating because seeding for range improvement generally is marginally successful due to extremely high soil pH. Brush management is beneficial when there are enough grasses left in the community to respond to the release from competition.

Alkaline Slopes #297 Range Site

The annual precipitation is less than 12 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Galleta, Wyoming big sagebrush, black greasewood, shadscale, winterfat, and bud sagebrush make up most of the annual production in the potential plant community of this site. Other grasses are bottlebrush squirreltail, western wheatgrass, and sand dropseed. The major forbs are greenmolly summercypress and milkvetch.

The total potential annual production, air-dry weight, of this plant community ranges from 700 pounds per acre in years of favorable growth conditions to 400 pounds per acre in years of below average growing conditions. About 30 percent of the yield can be used as forage and browse for cattle, and about 35 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial plants, especially western wheatgrass, winterfat, and bud sagebrush, and increases galleta, Wyoming big sagebrush, shadscale, black greasewood, and other shrubs. Plants that commonly invade the site include cheatgrass, Russian thistle, and halogeton.

Proper grazing management and a planned grazing system are necessary to maintain plant vigor and to prevent this site from deteriorating. Seeding for range improvement generally is marginally successful due to extremely high soil pH and low precipitation. Brush management is beneficial when there are enough grasses left in the community to respond to the release from competition.

Brushy Loam #238 Range Site

The annual precipitation is approximately 18 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Mountain brome, elk sedge, nodding bromegrass, slender wheatgrass, western wheatgrass, Columbia needlegrass, Gambel oak, Saskatoon serviceberry, and mountain snowberry make up most of the annual production in the potential plant community of this site. Other grasses are prairie junegrass, oniongrass, and muttongrass. The major forbs are American vetch, western yarrow, silvery lupine, tall bluebells, aspen peavine, low larkspur, and bedstraw. Chokecherry and Woods rose are the other shrubs present in the plant community.

The total potential annual production, air-dry weight, of this plant community ranges from 3,000 pounds per acre in years of favorable growth conditions to 1,500 pounds per acre in years of below average growing conditions. About 30 percent of the yield can be used as forage and browse for cattle, and about 35 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial grasses, especially mountain brome, nodding bromegrass, slender wheatgrass, western wheatgrass, prairie junegrass, oniongrass, and muttongrass, and increases Columbia needlegrass, Gambel oak, Saskatoon serviceberry, mountain snowberry, and other shrubs. Plants that commonly invade the site include tall rabbitbrush, Kentucky bluegrass, Canada thistle, and downy brome.

Proper grazing management and a planned grazing system are practices that can be applied to this site. Brush management generally is not effective for more than 3 or 4 years on this site.

Clayey 9-11 #419 Range Site

The annual precipitation is approximately 10 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Thickspike wheatgrass, western wheatgrass, streambank wheatgrass, Sandberg bluegrass, and Nevada bluegrass make up most of the annual production in the potential plant community of this site. Other grasses are bottlebrush squirreltail, Indian ricegrass, and prairie junegrass. The major forbs are foothills deathcamas, Hoods phlox, scarlet globemallow, western yarrow, white aster, and grasses

tapertip hawksbeard. Birdfoot sagebrush, Gardner saltbush, winterfat, and Wyoming big sagebrush are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 625 pounds per acre in years of favorable growth conditions to 475 pounds per acre in years of below average growing conditions. About 15 percent of the yield can be used as forage and browse for cattle, and about 10 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial grasses, especially Nevada bluegrass, Sandberg bluegrass, western wheatgrass, Indian ricegrass, and prairie junegrass, and increases Hoods phlox, western yarrow, plains pricklypear, low rabbitbrush, and other shrubs. Plants that commonly invade the site include mustard, Douglas knotweed, and cheatgrass.

Care should be exercised so this site is not overgrazed because it is very fragile. This can be difficult because it is intermixed with other, more productive sites. Proper grazing use and a planned grazing system will prevent deterioration of the site condition.

Clayey Foothills #289 Range Site

The annual precipitation is approximately 13 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Western wheatgrass, Indian ricegrass, and muttongrass, make up most of the annual production in the potential plant community of this site. Other grasses are Letterman needlegrass, beardless wheatgrass, and bluebunch wheatgrass. The major forbs are buckwheat, scarlet globemallow, and penstemon. Wyoming big sagebrush and Douglas rabbitbrush are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 1,200 pounds per acre in years of favorable growth conditions to 600 pounds per acre in years of below average growing conditions. About 35 percent of the yield can be used as forage and browse for cattle, and about 40 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial grasses, especially western wheatgrass, Indian ricegrass, and muttongrass, and increases Wyoming big sagebrush, Douglas rabbitbrush, and other shrubs. Plants that commonly invade the site include pinyon pine, oneseed juniper, rubber rabbitbrush, pingue hymenoxys, broom snakeweed, cheatgrass, and in some drier areas shadscale and black greasewood.

Proper grazing use and a planned grazing system will maintain rangeland that is in good condition, and will improve rangeland that is in poor condition. Brush management may be necessary to reduce excessive competition from shrub species. Where rangeland can not be improved by these practices and where slopes are not too steep, the site may be seeded to adapted native plants if the range condition is very poor.

Clayey Saltdesert #403 Range Site

The annual precipitation is approximately 10 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Gardner saltbush, mat saltbush, shadscale, and galleta make up most of the annual production in the potential plant community of this site. Other grasses are Saline wildrye, Indian ricegrass, and bottlebrush squirreltail. The major forbs are desert princesplume, Hoods phlox, scarlet globemallow, tufted eveningprimrose, sego lily, and buckwheat. Woody aster, plains pricklypear, spiny horsebrush, low rabbitbrush, and broom snakeweed are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 500 pounds per acre in years of favorable growth conditions to 200 pounds per acre in years of below average growing conditions. About 15 percent of the yield can be used as forage and browse for cattle, and about 40 percent can be used for sheep.

Continued overgrazing by cattle or other disturbance reduces the percentage of the more palatable perennial plants, especially Indian ricegrass, bottlebrush squirreltail, Gardner saltbush, and western wheatgrass, and increases mat saltbush, shadscale, and other shrubs. Continued overgrazing by sheep reduces the percentage of the more palatable plants especially Gardner saltbush, shadscale, mat saltbush, Saline wildrye, and Indian ricegrass. Plants that commonly invade the site include blue mustard, cheatgrass, Russian thistle, and halogeton.

Care should be exercised so this site is not overgrazed because it is very fragile. Proper grazing use and a planned grazing system will prevent deterioration of the site condition.

Clayey Slopes #246 Range Site

The annual precipitation is approximately 11 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Western wheatgrass, Saline wildrye, and muttongrass make up most of the annual production in the potential plant community of this site. Other

Figure 20.—Sage traps snow during the winter supplying extra soil moisture for plant growth in the spring. Here a stand of sage has been grazed by cattle during a long winter.

Figure 21.—A stand of aspen on an area of map unit 121, Leaps clay loam, 3 to 15 percent slopes, very stony. Aspen is used for timber production and the understory is grazed by wildlife and livestock during the summer months.

Figure 22.—Elk grazing on an area of map unit 39, Cochetopa loam, warm, 3 to 12 percent slopes. In the foreground is a Mountain Loam ecological site; in the background is a Brushy Loam ecological site.

Figure 23.—Stands of pinyon pine and Utah juniper are more common in the central and western parts of Moffat County.

Figure 24.—Soils adjacent to the Yampa River, south of Craig, are subject to frequent flooding.

Figure 25.—Leaving wheat stubble in place helps to build up crop residue and reduce erosion.

Figure 26.—Wetlands are important ecosystems in Moffat County, providing water and habitat for livestock and wildlife.

Figure 27.—Soils with high shrink-swell potential pose a problem for buildings and construction. Here a wall of a structure has been destroyed by the shrink-swell movement of the underlying soil.

Figure 28.—Here a sidewalk in a new subdivision has been heaved upward by the shrink-swell movement of the underlying soil. Proper planning, design, and construction can overcome the limitations of soils with high shrink-swell potential.

Figure 29.—Irrigated hay and pasture provide supplemental forage for livestock during winter months.

are prairie junegrass, bottlebrush squirreltail, Nevada bluegrass, Sandberg bluegrass, and Indian ricegrass. The major forbs are tapertip onion, Hoods phlox, hollyleaf clover, stonecrop, daisy fleabane, and aster. Wyoming big sagebrush, shadscale, and Utah serviceberry, are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 800 pounds per acre in years of favorable growth conditions to 300 pounds per acre in years of below average growing conditions. About 25 percent of the yield can be used as forage and browse for cattle, and about 35 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial grasses, especially western wheatgrass, Saline wildrye, muttongrass, and prairie junegrass and increases shadscale, Wyoming big sagebrush, and other shrubs. Plants that commonly invade the site include cheatgrass and other introduced plants.

Claypan #296 Range Site

The annual precipitation is approximately 13 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Alkali sagebrush, western wheatgrass, bluebunch wheatgrass, pine needlegrass, prairie junegrass, Nevada bluegrass, and muttongrass make up most of the annual production in the potential plant community of this site. Other grasses are Sandberg bluegrass, thickspike wheatgrass, and streambank wheatgrass. The major forbs are native clovers, buckwheat, Hoods phlox, rose pussytoes, tapertip onion, daisy fleabane, and aster. Stickyleaf low rabbitbrush and fringed sagebrush are other shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 800 pounds per acre in years of favorable growth conditions to 300 pounds per acre in years of below average growing conditions. About 25 percent of the yield can be used as forage and browse for cattle, and about 40 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial grasses, especially western wheatgrass, bluebunch wheatgrass, pine needlegrass, prairie junegrass, Nevada bluegrass, and muttongrass, and increases Sandberg bluegrass, bottlebrush squirreltail, and shrubs such as stickyleaf low rabbitbrush and alkali sagebrush. If the site is grazed by sheep, alkali sagebrush will decrease with continued overgrazing.

Cold Desert Breaks #420 Range Site

The annual precipitation is approximately 9 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Needleandthread, galleta, Indian ricegrass, and Wyoming big sagebrush make up most of the annual production in the potential plant community of this site. Other grasses are bottlebrush squirreltail, sand dropseed, and western wheatgrass. The major forbs are dustymaiden, Hoods phlox, scarlet globemallow, stemless actinea, and tufted eveningprimrose. Shadscale, spiny horsebrush, and winterfat are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 600 pounds per acre in years of favorable growth conditions to 350 pounds per acre in years of below average growing conditions. About 20 percent of the yield can be used as forage and browse for cattle, and about 15 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial plants, especially Indian ricegrass, needleandthread, western wheatgrass, and winterfat, and increases broom snakeweed, Nuttall horsebrush, plains pricklypear, spiny horsebrush, Wyoming big sagebrush, and other shrubs. Plants that commonly invade the site include cheatgrass, Russian thistle, and other introduced annual plants.

Care must be exercised to prevent overgrazing of this site because it is adjacent with other more productive sites. Proper grazing use and a planned grazing system that varies the season of grazing from one year to the next. Brush management may be necessary if the shrubs become excessive. Spraying the brush is most successful and also keeps disturbance of the site to a minimum. Steep slopes and rocks on the soil surface prevent mechanical brush management. Seeding may be necessary if there is not enough grass to respond to either grazing management or brush management.

Cold Desert Overflow #421 Range Site

The annual precipitation is approximately 9 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Basin wildrye, western wheatgrass, and common reed make up most of the annual production in the potential plant community of this site. Other grasses

are bottlebrush squirreltail, inland saltgrass, scratchgrass, and alkali sacaton. The major forbs are dandelion and scouringrush. Sandbar willow, rubber rabbitbrush, fourwing saltbush, and skunkbush sumac are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 3,000 pounds per acre in years of favorable growth conditions to 1,000 pounds per acre in years of below average growing conditions. About 40 percent of the yield can be used as forage and browse for cattle, and about 45 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial plants, especially alkali sacaton, dandelion, and fourwing saltbush, and increases common reed, inland saltgrass, rushes, scratchgrass, black greasewood, rubber rabbitbrush, scouringrush horsetail, and other shrubs. Plants that commonly invade the site include tamarisk, Russian thistle, Kentucky bluegrass, and cheatgrass.

This site should be managed very carefully due to the potential adverse affect this can have on the riparian area. Proper grazing use and a planned grazing system, if properly planned with upland sites, will prevent abuse of the site. The site has good potential for seeding to native and adapted species if the site is in poor or fair condition due to lack of grasses on the site.

Deep Clay Loam #247 Range Site

The annual precipitation is approximately 18 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Western wheatgrass, Letterman needlegrass, muttongrass, slender wheatgrass, and nodding bromegrass make up most of the annual production in the potential plant community of this site. Other grasses are Columbia needlegrass and bottlebrush squirreltail. The major forbs are silvery lupine, mulesear wyethia, Wyoming paintedcup, and sulfur buckwheat. Mountain big sagebrush, mountain snowberry, and Saskatoon serviceberry are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 2,500 pounds per acre in years of favorable growth conditions to 800 pounds per acre in years of below average growing conditions. About 40 percent of the yield can be used as forage and browse for cattle, and about 45 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial plants, especially Letterman needlegrass, muttongrass, slender wheatgrass, and nodding bromegrass, and increases mulesear wyethia, sulfur buckwheat, mountain big sagebrush, mountain snowberry, Saskatoon serviceberry, and other shrubs. Plants that commonly invade the site include tall rabbitbrush, trailing fleabane, rubber rabbitbrush, houndstongue, Kentucky bluegrass, pepperweed whitetop, and other annuals.

This site generally responds very well to proper grazing use and a planned grazing system. If the site is in fair or poor condition due to excessive amounts of competitive shrubs, brush management can improve range condition as well as the grazing value of the rangeland. Mechanical brush management is applicable only on soils without large stones on the surface and where slopes are not excessive.

Deep Loam #292 Range Site

The annual precipitation is approximately 15 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Needleandthread, western wheatgrass, muttongrass, and prairie junegrass make up most of the annual production in the potential plant community of this site. Other grasses are bluebunch wheatgrass, Indian ricegrass, Sandberg bluegrass, and Nevada bluegrass. The major forbs are tapertip hawksbeard, scarlet globemallow, arrowleaf balsamroot, Wyoming paintedcup, Fremont penstemon, nuttall larkspur, longleaf phlox, hollyleaf clover, mountain bluebells, rose gilia, trailing fleabane, and silvery lupine. Mountain big sagebrush, Saskatoon serviceberry, mountain snowberry, and stickyleaf low rabbitbrush are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 1,800 pounds per acre in years of favorable growth conditions to 900 pounds per acre in years of below average growing conditions. About 40 percent of the yield can be used as forage and browse for cattle, and about 45 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial grasses, especially needleandthread, muttongrass, prairie junegrass, bluebunch wheatgrass, Nevada bluegrass, and Indian ricegrass, and increases arrowleaf balsamroot, mountain big sagebrush, Saskatoon serviceberry, and other forbs and shrubs. Plants that commonly invade the site include cheatgrass, Kentucky bluegrass, pinyon pine, and juniper.

This site responds well to proper grazing use and a planned grazing system. If the site is in fair or poor condition due to excessive amounts of competitive shrubs, brush management can improve range condition and the grazing value of the rangeland.

Mechanical brush management is applicable only on soils without large stones on the surface and where slopes are not excessive.

Douglas-fir Woodland Site

The annual precipitation is approximately 17 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Douglas-fir with an understory of mountain brome, nodding bromegrass, elk sedge, mountain snowberry, and Saskatoon serviceberry make up most of the annual production in the potential plant community of this site.

The total potential annual production, air-dry weight, of the understory of this plant community ranges from 800 pounds per acre in years of favorable growth conditions to 400 pounds per acre in years of below average growing conditions. About 20 percent of the yield can be used as forage and browse for cattle, and about 30 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial grasses, especially mountain brome, nodding bromegrass, and elk sedge, and increases mountain snowberry, Saskatoon serviceberry, and other shrubs and trees.

This site generally has a sparse understory due to a dense tree cover. Thinning the trees to allow more grasses to occupy the understory and proper grazing use will result in a better site for livestock grazing and will help to control water erosion.

Dry Exposure #235 Range Site

The annual precipitation is approximately 14 to 18 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Bluebunch wheatgrass, western wheatgrass, needleandthread, prairie junegrass, Indian ricegrass, thickspike wheatgrass, and streambank wheatgrass make up most of the annual production in the potential plant community of this site. The major forbs are scarlet globemallow, Hoods phlox, pingue hymenoxys, cushion buckwheat, rose pussytoes, mat loco, and matted nailwort. Winterfat, black sagebrush, fringed sagebrush, low rabbitbrush, and plains pricklypear are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 700 pounds per acre in years of favorable growth conditions to 150 pounds per acre in years of below average growing conditions. About 40 percent of the yield can be used as forage and browse for cattle, and about 45 percent can be used for sheep.

Continued overgrazing by cattle reduces the percentage of the more palatable perennial plants, especially bluebunch wheatgrass, Indian ricegrass, Nevada bluegrass, prairie junegrass, western wheatgrass, and winterfat, and increases fringed sagebrush and other shrubs. Continued overgrazing by sheep reduces the percentage of the more palatable perennial plants, especially bluebunch wheatgrass, Indian ricegrass, Nevada bluegrass, prairie junegrass, sheep fescue, rose pussytoes, black sagebrush, fringed sagebrush, and winterfat, and increases cushion buckwheat, Hoods phlox, pingue hymenoxys, matted nailwort, plains pricklypear, and other shrubs. Few plants invade this site. With severe overgrazing, the production becomes very low and the site eventually becomes barren.

This site is very droughty, which makes seeding of the site generally unsuccessful. The vegetation is rarely dominated by brushy species, and brush control is rarely necessary. The only practices that can be used to maintain and improve the site are proper grazing use and a planned grazing system.

Dry Mountain Loam #231 Range Site

The annual precipitation is approximately 13 to 17 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Bluebunch wheatgrass, letterman needlegrass, streambank wheatgrass, needleandthread, and sheep fescue make up most of the annual production in the potential plant community of this site. Other grasses are thickspike wheatgrass, muttongrass, Nevada bluegrass, prairie junegrass, bottlebrush squirreltail, and Indian ricegrass. The major forbs are Hoods phlox, rose pussytoes, sulfur buckwheat, sedum, mountain bluebells, arrowleaf balsamroot, Rocky Mountain penstemon, silvery lupine, western yarrow, sticky gilia, Wyoming paintedcup, and mat penstemon. Wyoming big sagebrush, mountain big sagebrush, stickyleaf low rabbitbrush, antelope bitterbrush, mountain snowberry, and Saskatoon serviceberry are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 1,000 pounds per acre in years of favorable growth conditions to 500 pounds per acre in years of below average growing conditions. About 30 percent of the yield can be used as forage and browse for cattle, and about 40 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial grasses, especially bluebunch wheatgrass, needleandthread, Nevada

bluegrass, prairie junegrass, Indian ricegrass, and pine needlegrass, and increases all the forbs, Wyoming big sagebrush, stickyleaf low rabbitbrush, Saskatoon serviceberry, and other shrubs. Plants that commonly invade the site include rubber rabbitbrush and other introduced plants.

Seeding of this site is not advisable; however, brush control usually is very beneficial if shrubby species become dominant on the site. Proper grazing use and a planned grazing system will improve range condition.

Dry Sandy #434 Range Site

The annual precipitation is approximately 10 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Indian ricegrass, needleandthread, Nevada bluegrass, and threadleaf sedge make up most of the annual production in the potential plant community of this site. Other grasses are bottlebrush squirreltail, Sandberg bluegrass, streambank wheatgrass, and bluebunch wheatgrass. The major forbs are bastard toadflax, hoary townsendia, Hoods phlox, Hooker sandwort, and sulphur buckwheat. Black sagebrush and gray horsebrush are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 650 pounds per acre in years of favorable growth conditions to 300 pounds per acre in years of below average growing conditions. About 40 percent of the yield can be used as forage and browse for cattle, and about 35 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial plants, especially bluebunch wheatgrass, Indian ricegrass, needleandthread, Sandberg bluegrass, streambank wheatgrass, and winterfat, and increases black sagebrush, fringed sagebrush, and other shrubs. Plants that commonly invade the site include cheatgrass, Russian thistle, halogeton, kochia, and perfoliated pepperweed.

This site is very susceptible to abuse by overgrazing. Seeding the site to improve range condition and production generally is only marginally successful. The best methods of range improvement are proper grazing use and a planned grazing system. Competitive shrubs never become thick enough to be a problem.

Englemann Spruce/Subalpine Fir Woodland Site

The annual precipitation is approximately 20 or more inches; most of this occurs during the late fall, winter, and early spring (October through April).

Slender wheatgrass, elk sedge, boxleaf myrtle, common juniper, and Oregon-grape make up most of the annual production in the potential plant community of this site.

The total potential annual production, air-dry weight, of this plant community ranges from 350 pounds per acre in years of favorable growth conditions to 200 pounds per acre in years of below average growing conditions. About 20 percent of the yield can be used as forage and browse for cattle, and about 20 percent can be used for sheep. The site is rarely used for grazing.

If this site burns, lodgepole pine may become established on the site, and can occupy the site for many years.

Foothill Juniper #447 Range Site

The annual precipitation is approximately 13 inches; most of this occurs during the late fall, winter, and early spring (October through April).

This site has a Utah juniper woodland overstory. Galleta, Indian ricegrass, bluebunch wheatgrass, needleandthread, Sandberg bluegrass, and squirreltail make up most of the annual production in the understory potential plant community of this site. The major forbs are Hoods phlox, scarlet globemallow, and stemless goldenweed. Utah juniper, Wyoming big sagebrush, broom snakeweed, black sagebrush, and Utah serviceberry are the main shrubs. Some sites may have scattered pinyon pine.

The total potential annual production, air-dry weight, of this plant community ranges from 500 pounds per acre in years of favorable growth conditions to 150 pounds per acre in years of below average growing conditions. About 20 percent of the yield can be used as forage and browse for cattle, and about 40 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial grasses, especially Indian ricegrass, bluebunch wheatgrass, and western wheatgrass, and increases galleta, broom snakeweed, dwarf rabbitbrush, Wyoming big sagebrush, and other shrubs. Plants that commonly invade the site include cheatgrass and Russian thistle.

This site usually is dominated by Utah juniper to the near exclusion of the understory. If the understory is not managed properly, the juniper trees can out-compete all other plants for both soil moisture and light. When this occurs the soil becomes nearly bare and erosion rates become extremely high. Anything that will benefit the understory plants will help to

prevent these severe erosion rates. Proper grazing use and a planned grazing system are basic to improvement of the vegetation. Mechanical seeding is not suitable because either the slopes are too steep or the surface soil contains too many rock fragments. Many times the trees on these sites have a closed canopy, in which case the best method of improvement is clearing part or all of the trees. This can be done by cutting or by prescribed burning.

Foothill Swale #285 Range Site

The annual precipitation is approximately 13 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Basin wildrye, western wheatgrass, streambank wheatgrass, and basin big sagebrush make up most of the annual production in the potential plant community of this site. Other grasses are Indian ricegrass, bottlebrush squirreltail, and Nevada bluegrass. The major forbs are western yarrow, trailing fleabane, scarlet globemallow, Wyoming paintedcup, and Louisiana sagewort. Rubber rabbitbrush and fourwing saltbush are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 3,000 pounds per acre in years of favorable growth conditions to 1,000 pounds per acre in years of below average growing conditions. About 35 percent of the yield can be used as forage and browse for cattle, and about 25 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial plants, especially basin wildrye, western wheatgrass, streambank wheatgrass, Indian ricegrass, and fourwing saltbush, and increases forbs, basin big sagebrush, and other shrubs. Plants that commonly invade the site include Kentucky bluegrass, cactus, Russian thistle, lambsquarters, goosefoot, mustard, broom snakeweed, and black greasewood.

Brush management is a good method of improving range condition, increasing production, and reducing erosion if competitive shrubs become dominant on the site. Seeding of adapted grasses can improve range condition and increase usable production if the area is in poor condition. Proper grazing use and a planned grazing system can improve range condition.

Gravelly #422 Range Site

The annual precipitation is approximately 11 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Bluebunch wheatgrass, bottlebrush squirreltail, Indian ricegrass, needleandthread, Nevada bluegrass, Sandberg bluegrass, and black sagebrush make up most of the annual production in the potential plant community of this site. Other grasses are prairie junegrass, streambank wheatgrass, thickspike wheatgrass, and western wheatgrass. The major forbs are cushion buckwheat, heath aster, lanceleaf bluebells, longleaf phlox, mat loco, mat penstemon, rose pussytoes, scarlet globemallow, tapertip hawksbeard, and Wyoming paintedcup. Wyoming big sagebrush, birdfoot sagebrush, Gardner saltbush, shadscale, stickyleaf low rabbitbrush, and winterfat are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 600 pounds per acre in years of favorable growth conditions to 400 pounds per acre in years of below average growing conditions. About 25 percent of the yield can be used as forage and browse for cattle, and about 35 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial plants, especially bluebunch wheatgrass, Indian ricegrass, needleandthread, and winterfat, and increases forbs, black sagebrush, Wyoming big sagebrush, and other shrubs. Plants that commonly invade the site include cheatgrass, halogeton, and perfoliated pepperweed.

This site is very susceptible to abuse by overgrazing. Seeding the site to improve range condition and production generally is only marginally successful. The best methods of range improvement are proper grazing use and a planned grazing system. Competitive shrubs never become thick enough to be a problem.

Limy Cold Desert #423 Range Site

The annual precipitation is approximately 9 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Indian ricegrass, needleandthread, and Nevada bluegrass are the dominant grasses in the potential plant community of this site. Other grasses are bottlebrush squirreltail, thickspike wheatgrass, western wheatgrass, and sand dropseed. The major forbs are scarlet globemallow and dustymaiden. Winterfat, shadscale, Nuttall horsebrush, and bud sagebrush are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 725 pounds per acre in years of favorable growth conditions to 450 pounds per acre in years of below average growing conditions. About 35 percent of the yield can be used as forage and browse for cattle, and about 40 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial plants, especially Indian ricegrass, needleandthread, western wheatgrass, bud sagebrush, Gardner saltbush, and winterfat, and increases sixweeks fescue, dustymaiden, stickyleaf low rabbitbrush, Nuttall horsebrush, and other shrubs. Plants that commonly invade the site include cheatgrass and halogeton.

This site is very susceptible to overgrazing. Seeding the site to improve range condition and production generally is only marginally successful. The best methods of range improvement are proper grazing use and a planned grazing system.

Loamy 10-14 #425 Range Site

The annual precipitation is approximately 12 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Bluebunch wheatgrass and streambank wheatgrass make up most of the annual production in the potential plant community of this site. Other grasses are Sandberg bluegrass, prairie junegrass, Nevada bluegrass, Letterman needlegrass, muttongrass, needleleaf sedge, and Indian ricegrass. The major forbs are Utah sweetvetch, arrowleaf balsamroot, and many others. Wyoming big sagebrush, shadscale, winterfat, black sagebrush, and bud sagebrush are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 1,200 pounds per acre in years of favorable growth conditions to 700 pounds per acre in years of below average growing conditions. About 40 percent of the yield can be used as forage and browse for cattle, and about 50 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial grasses, especially bluebunch wheatgrass, streambank wheatgrass, and muttongrass, and increases needleleaf sedge, Wyoming big sagebrush, and other shrubs. Plants that commonly invade the site include mustard, toadflax, Douglas knotweed, and cheatgrass.

This site is very susceptible to overgrazing. Seeding the site to improve range condition and production usually is only marginally successful. The best methods of range improvement are proper grazing use and a planned grazing system.

Loamy 9-11 #424 Range Site

The annual precipitation is approximately 10 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Indian ricegrass, needleandthread, and streambank wheatgrass make up most of the annual production in the potential plant community of this site. Other grasses are thickspike wheatgrass, western wheatgrass, bottlebrush squirreltail, Sandberg bluegrass, and Nevada bluegrass. The major forbs are sulphur buckwheat and scarlet globemallow. Wyoming big sagebrush, shadscale, and Gardner saltbush are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 725 pounds per acre in years of favorable growth conditions to 300 pounds per acre in years of below average growing conditions. About 30 percent of the yield can be used as forage and browse for cattle, and about 50 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial grasses, especially Indian ricegrass, needleandthread, streambank wheatgrass, and thickspike wheatgrass, and increases Wyoming big sagebrush, Gardner saltbush, and other shrubs. Plants that commonly invade the site include cheatgrass, curled dock, perfoliated pepperweed, kochia, and halogeton.

This site is very susceptible to overgrazing. Seeding the site to improve range condition and production generally is only marginally successful. The best methods of range improvement are proper grazing use and a planned grazing system.

Loamy Breaks #300 Range Site

The annual precipitation is approximately 16 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Western wheatgrass, Sandberg bluegrass, and Nevada bluegrass make up most of the annual production in the potential plant community of this site. The major forbs are arrowleaf balsamroot, silvery lupine, loco, and stemless goldenweed. Wyoming big sagebrush, black sagebrush, antelope bitterbrush, and true mountainmahogany are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 800 pounds per acre in years of favorable growth conditions to 400 pounds per acre in years of below average growing conditions. About 15 percent of the yield can be used as forage and browse for cattle, and about 30 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial plants, especially western wheatgrass, Nevada bluegrass, bluebunch wheatgrass, and antelope bitterbrush, and increases buckwheat, arrowleaf balsamroot, low rabbitbrush, broom snakeweed, and other shrubs. Plants that

commonly invade the site include cheatgrass and Russian thistle.

This site usually is of limited value as grazing land. If the site is grazed, care must be exercised to prevent a downward trend of range condition. Proper grazing use, deferred grazing, and a planned grazing system can prevent this downward trend.

Loamy Cold Desert #426 Range Site

The annual precipitation is approximately 9 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Indian ricegrass, thickspike wheatgrass, and needleandthread make up most of the annual production in the potential plant community of this site. Other grasses are Nevada bluegrass, bottlebrush squirreltail, and muttongrass. The major forbs are hoary townsendia, littleleaf pussytoes, Pacific aster, and stemless springparsley. Shadscale, black sagebrush, broom snakeweed, winterfat, and Wyoming big sagebrush are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 600 pounds per acre in years of favorable growth conditions to 250 pounds per acre in years of below average growing conditions. About 15 percent of the yield can be used as forage and browse for cattle, and about 30 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial plants, especially Indian ricegrass, muttongrass, Nevada bluegrass, and winterfat, and increases foothills deathcamas, Hoods phlox, littleleaf pussytoes, stemless springparsley, tufted eveningprimrose, broom snakeweed, and other shrubs. Plants that commonly invade the site include black greasewood and cheatgrass.

This site is so droughty that seeding to improve range condition generally is not successful. Brush management by burning, chemicals, or mechanical methods usually is not desirable since the shrubs are the dominant part of the wildlife diet during the winter with snow cover. The best methods of improving range condition and vigor are proper grazing use, deferment, and a planned grazing system.

Loamy Saltdesert #401 Range Site

The annual precipitation is approximately 10 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Galleta, Indian ricegrass, and shadscale make up most of the annual production in the potential plant community of this site. Other grasses are needleandthread, bottlebrush squirreltail, and Sandberg bluegrass. The major forbs are fernleaf biscuitroot, scarlet globemallow, Indian paintbrush, Hoods phlox, and sego lily. Gardner saltbush, winterfat, broom snakeweed, Wyoming big sagebrush, and bud sagebrush are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 700 pounds per acre in years of favorable growth conditions to 475 pounds per acre in years of below average growing conditions. About 15 percent of the yield can be used as forage and browse for cattle, and about 25 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial plants, especially Indian ricegrass, needleandthread, and winterfat, and increases galleta, most forbs, broom snakeweed, and other shrubs. Plants that commonly invade the site include cheatgrass, halogeton, Russian thistle, and mustards.

Seeding generally is unsuccessful since the climate is so droughty. Brush management usually is not necessary. The best methods of improving range condition and vigor include proper grazing use, deferment, and planned grazing system.

Lodgepole Pine Woodland Site

The annual precipitation is approximately 19 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Lodgepole pine with an understory of grouse whortleberry, mountain brome, spike trisetum, blue wildrye, heartleaf arnica, northern bedstraw, elk sedge, common juniper, and russet buffaloberry make up most of the annual production in the potential plant community of this site.

The total potential annual production, air-dry weight, of this plant community ranges from 350 pounds per acre in years of favorable growth conditions to 150 pounds per acre in years of below average growing conditions.

Mountain Loam #228 Range Site

The annual precipitation is approximately 18 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Slender wheatgrass, Columbia needlegrass, and Letterman needlegrass make up most of the annual production in the potential plant community of this site. Other grasses are mountain brome, nodding bromegrass, elk sedge, and prairie junegrass. The major forbs are sulphur buckwheat and silvery lupine. Mountain snowberry and mountain big sagebrush are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 1,800 pounds per acre in years of favorable growth conditions to 1,000 pounds per acre in years of below average growing conditions. About 30 percent of the yield can be used as forage and browse for cattle, and about 35 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial grasses, especially slender wheatgrass, Letterman needlegrass, mountain brome, and nodding bromegrass, and increases mountain big sagebrush and mountain snowberry. Plants that commonly invade the site include cheatgrass, broom snakeweed, tall rabbitbrush, Hoods phlox, and nailwort.

If this site is in very poor condition seeding may be necessary. Brush management can usually improve condition enough that erosion is controlled. Deferment from grazing, proper grazing use, and a planned grazing system will preserve plant vigor and maintain range condition.

Mountain Swale #245 Range Site

The annual precipitation is approximately 17 inches; most of this occurs during the late fall, winter, and early spring (October through April). The amount of precipitation is not as important as the landscape position. This site occurs in a run-in position so the effective precipitation is much greater than the 17 inches.

Slender wheatgrass, western wheatgrass, Letterman needlegrass, mountain brome, and nodding bromegrass make up most of the annual production in the potential plant community of this site. The major forbs are lupine and cinquefoil. Basin big sagebrush and shrubby cinquefoil are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 3,000 pounds per acre in years of favorable growth conditions to 2,000 pounds per acre in years of below average growing conditions. About 35 percent of the yield can be used as forage and browse for cattle, and about 40 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial grasses, especially mountain brome, nodding bromegrass, and slender wheatgrass, and increases basin big sagebrush and shrubby cinquefoil. Plants that commonly invade the site include cheatgrass, houndstongue, thistles, Kentucky bluegrass, mustard, and dandelion.

This site usually benefits greatly from proper grazing use, deferred grazing, and a planned grazing system. Other practices generally are not necessary to prevent excessive erosion.

Mountain Stony Loam #378 Range Site

The annual precipitation is approximately 17 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Bluebunch wheatgrass, muttongrass, Sandberg bluegrass, oniongrass, curlleaf mountainmahogany, mountain snowberry, and Utah serviceberry make up most of the annual production in the potential plant community of this site. Other grasses are slender wheatgrass and elk sedge. The major forbs are arrowleaf balsamroot, Louisiana sagewort, and many others. Chokecherry, mountain big sagebrush, Oregon-grape, boxleaf myrtle, and many others are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 2,500 pounds per acre in years of favorable growth conditions to 1,300 pounds per acre in years of below average growing conditions. About 10 percent of the yield can be used as forage and browse for cattle, and about 25 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial grasses, especially bluebunch wheatgrass, muttongrass, and slender wheatgrass, and increases most forbs and shrubs. Plants that commonly invade the site include cheatgrass and other introduced plants.

Conservation practices that will improve the site are proper grazing use, deferred grazing, and a planned grazing system. If the site is burned, curlleaf mountainmahogany, and mountain big sagebrush decrease while snowbrush ceanothus, chokecherry, elk sedge, and bluebunch wheatgrass increase.

Riverbottom #236 Range Site

The annual precipitation is approximately 14 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Western wheatgrass, basin wildrye, slender wheatgrass, Nebraska sedge, many forbs, willow, and scattered Fremont cottonwood trees.

The total potential annual production, air-dry weight, of the understory of this plant community ranges from 2,000 pounds per acre in years of favorable growth conditions to 1,500 pounds per acre in years of below average growth conditions. About

70 percent of the yield can be used as forage and browse for cattle and sheep.

Continued overgrazing reduces the percentage of the more palatable perennial grasses, especially western wheatgrass, basin wildrye, and slender wheatgrass, and increases foxtail barley, scratchgrass, rushes, and sedges.

Proper grazing management and a planned grazing system are necessary to maintain plant vigor and to prevent invasion of introduced species whose seed is always being washed downstream.

Rolling Loam #298 Range Site

The annual precipitation is approximately 13 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Western wheatgrass, needleandthread, Nevada bluegrass, and Indian ricegrass make up most of the annual production in the potential plant community of this site. Other grasses are prairie junegrass and bottlebrush squirreltail. Wyoming big sagebrush and small low rabbitbrush are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 1,000 pounds per acre in years of favorable growth conditions to 500 pounds per acre in years of below average growing conditions. About 25 percent of the yield can be used as forage and browse for cattle, and about 35 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial grasses, especially western wheatgrass, needleandthread, Nevada bluegrass, and Indian ricegrass, and increases Wyoming big sagebrush and other shrubs. Plants that commonly invade the site include bulbous bluegrass, cheatgrass, pinyon, and Utah juniper.

Seeding can be used to improve severely depleted rangeland. Where there are remnants of good grass species, brush management may be all that is necessary. Proper grazing use, deferment, and a planned grazing system will maintain plant vigor and improve range condition.

Salt Flats #262 Range Site

The annual precipitation is approximately 14 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Alkali sacaton, basin wildrye, inland saltgrass, western wheatgrass, Sandberg bluegrass, bottlebrush squirreltail, basin big sagebrush, black greasewood, and some Wyoming big sagebrush make up most of the annual production in the potential plant community of this site. Major forbs include scarlet globemallow and sulphur eriogonum.

The total potential annual production, air-dry weight, of this plant community ranges from 900 pounds per acre in years of favorable growth to 450 pounds per acre in years of below average growth conditions. About 70 percent of the yield can be used as forage and browse for cattle and sheep.

Continued overgrazing reduces the percentage of the more palatable perennial plants, especially alkali sacaton and basin wildrye, and increases inland saltgrass, basin big sagebrush, and black greasewood.

Proper grazing management and a planned grazing system are necessary to maintain plant vigor and to prevent the site from deteriorating. Seeding for range improvement generally is marginally successful due to salts in the soil. Brush management is beneficial when there are enough grasses left in the community to respond to the release from competition.

Salt Meadow 266 Range Site

The annual precipitation is approximately 12 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Alkali sacaton, inland saltgrass, western wheatgrass, and sedges make up most of the annual production in the potential plant community of this site. The major forbs are loco, aster, and milkvetch. Black greasewood, tall rabbitbrush, and fourwing saltbush are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 2,500 pounds per acre in years of favorable growth conditions to 1,500 pounds per acre in years of below average growing conditions. About 30 percent of the yield can be used as forage and browse for cattle, and about 35 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial plants, especially alkali sacaton, western wheatgrass, and fourwing saltbush, and increases inland saltgrass, rubber rabbitbrush, black greasewood, and other shrubs. Plants that commonly invade the site include cheatgrass, Kentucky bluegrass, Gardner saltbush, mat saltbush, redtop, and Russian thistle.

Soil limitations of this site make seeding difficult. The best method of maintaining or improving range condition is a plan of proper grazing use, deferment, and a planned grazing system.

Saltdesert Overflow #407 Range Site

The annual precipitation is approximately 10 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Alkali sacaton, galleta, and basin wildrye make up most of the annual production in the potential plant community of this site. Other grasses are Indian ricegrass, sand dropseed, and bottlebrush squirreltail. Fourwing saltbush, basin big sagebrush, and black greasewood are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 2,000 pounds per acre in years of favorable growth conditions to 1,000 pounds per acre in years of below average growing conditions. About 25 percent of the yield can be used as forage and browse for cattle, and about 30 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial plants, especially alkali sacaton, Indian ricegrass, and fourwing saltbush, and increases galleta, basin big sagebrush, black greasewood, and other shrubs. Plants that commonly invade the site include kochia, Russian thistle, and cheatgrass.

This site is easily abused due to its position on the landscape. Seeding generally is not successful due to animal concentrations. The best methods of range improvement are proper grazing use, deferment, and a planned grazing system.

Sandhills #293 Range Site

The annual precipitation is approximately 12 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Indian ricegrass, needleandthread, antelope bitterbrush, silver sagebrush, and Wyoming big sagebrush make up most of the annual production in the potential plant community of this site. Other grasses are Nevada bluegrass, prairie junegrass, sand dropseed, and bottlebrush squirreltail. The major forbs are arrowleaf balsamroot, longleaf phlox, and sand lupine. Plains pricklypear, gray horsebrush, small low rabbitbrush, and rubber rabbitbrush are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 1,200 pounds per acre in years of favorable growth conditions to 600 pounds per acre in years of below average growing conditions. About 30 percent of the yield can be used as forage and browse for cattle, and about 35 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial plants, especially Indian ricegrass, needleandthread, and antelope bitterbrush, and increases wooly locoweed, wormwood, granite gilia, gray horsebrush, plains pricklypear, and other shrubs. Plants that commonly invade the site include mustards, Russian thistle, and cheatgrass.

This site can be seeded if range condition is very poor. Usually range condition can be improved by mechanical, chemical, or burning methods of brush management. Proper grazing use, deferment, and a planned grazing system will maintain range condition.

Sandy 9-11 #427 Range Site

The annual precipitation is approximately 10 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Needleandthread, Indian ricegrass, bluebunch wheatgrass, bottlebrush squirreltail, and streambank wheatgrass make up most of the annual production in the potential plant community of this site. Other grasses are Nevada bluegrass, Sandberg bluegrass, prairie junegrass, and sand dropseed. The major forbs are foothill bladderpod, Hoods phlox, stemless actinea, and scarlet globemallow. Wyoming big sagebrush, shadscale, and spiny hopsage are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 750 pounds per acre in years of favorable growth conditions to 400 pounds per acre in years of below average growing conditions. About 20 percent of the yield can be used as forage and browse for cattle, and about 35 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial grasses, especially bluebunch wheatgrass, Indian ricegrass, needleandthread, and Nevada bluegrass, and increases most forbs, broom snakeweed, fringed sagebrush, tall rabbitbrush, and other shrubs. Plants that commonly invade the site include cheatgrass, halogeton, and perfoliated pepperweed.

With the low precipitation and sandy soils, this site is very droughty. Seeding usually is not feasible. Proper grazing use, deferred grazing, and a planned grazing system will improve plant vigor and range condition.

Sandy Cold Desert #428 Range Site

The annual precipitation is approximately 9 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Needleandthread, Indian ricegrass, and shadscale make up most of the annual production in the potential plant community of this site. Other grasses are bottlebrush squirreltail, galleta, Nevada bluegrass, and Sandberg bluegrass. The major forbs are scarlet globemallow and dustymaiden.

Spiny hopsage and Wyoming big sagebrush are other shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 800 pounds per acre in years of favorable growth conditions to 350 pounds per acre in years of below average growing conditions. About 20 percent of the yield can be used as forage and browse for cattle, and about 30 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial grasses, especially needleandthread, Indian ricegrass, and Nevada bluegrass, and increases bottlebrush squirreltail, galleta, spiny hopsage, Wyoming big sagebrush, and other shrubs. Plants that commonly invade the site include cheatgrass and halogeton.

This site is so droughty that seeding to improve range condition generally is not successful. This site does not usually produce enough vegetation to use burning as a method of brush management, which may not be desirable since the shrubs are valuable forage during the winter. The best methods of improving range condition and plant vigor include proper grazing use, deferment, and a planned grazing system..

Sandy Foothills #310 Range Site

The annual precipitation is approximately 13 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Needleandthread, western wheatgrass, and Indian ricegrass make up most of the annual production in the potential plant community of this site. Other grasses are galleta, bottlebrush squirreltail, and sand dropseed. The major forbs are arrowleaf balsamroot, sand lupine, and scarlet globemallow. Wyoming big sagebrush, small low rabbitbrush, and broom snakeweed are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 1,200 pounds per acre in years of favorable growth conditions to 500 pounds per acre in years of below average growing conditions. About 20 percent of the yield can be used as forage and browse for cattle, and about 40 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial grasses, especially needleandthread, western wheatgrass, and Indian ricegrass, and increases galleta, small low rabbitbrush, broom snakeweed, and other shrubs. Plants that commonly invade the site include sixweeks fescue, cheatgrass, pinyon, and Utah juniper.

This site can be seeded to improve range condition. Brush management is necessary where brush species become dominant. Brush management can be done by mechanical, chemical, or burning methods. Other practices that can be applied are proper grazing use, deferred grazing, and a planned grazing system.

Sandy Juniper #332 Range Site

The annual precipitation is between 8 and 14 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Utah juniper with scattered pinyon pine overstory with an understory of Indian ricegrass, bluebunch wheatgrass, and needleandthread make up most of the annual production in the potential plant community of this site.

The total potential annual production, air-dry weight, of this plant community ranges from 450 pounds per acre in years of favorable growth conditions to 100 pounds per acre in years of below average growing conditions. About 40 percent of the yield can be used for forage and browse for sheep.

If grazing is the cause of range condition decline, then proper grazing use, deferred grazing, and a planned grazing system will improve the condition class. If the trees become too dense, thinning or burning can improve the understory vegetation.

Continued overgrazing reduces the percentage of more palatable perennial grasses, especially Indian ricegrass, bluebunch wheatgrass, and needleandthread, and increases Wyoming big sagebrush and Utah juniper. Plants that commonly invade the site include cheatgrass and annual mustards

Sandy Land #330 Range Site

The annual precipitation is approximately 13 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Needleandthread, Indian ricegrass, and Wyoming big sagebrush make up most of the annual production in the potential plant community of this site. Other grasses are Nevada bluegrass and prairie junegrass. The major forbs are arrowleaf balsamroot and foothills deathcamas. Silver sagebrush and antelope bitterbrush are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 1,200 pounds per acre in years of favorable growth conditions to 600 pounds per acre in years of below average growing conditions. About 15 percent of the

yield can be used as forage and browse for cattle, and about 25 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial grasses, especially Indian ricegrass, needleandthread, and Nevada bluegrass, and increases Wyoming big sagebrush, rubber rabbitbrush, broom snakeweed, and other shrubs. Plants that commonly invade the site include Russian thistle, cheatgrass, and annual mustards.

This site can be seeded to improve range condition. Brush management is necessary where brush species become dominant. Brush management can be done by mechanical, chemical, or burning methods. Other practices that apply are proper grazing use, deferred grazing, and a planned grazing system.

Sandy Slopes #331 Range Site

The annual precipitation is approximately 12 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Indian ricegrass, needleandthread, western wheatgrass galleta, bottlebrush squirreltail, and prairie junegrass make up most of the annual production in the potential plant community of this site. Antelope bitterbrush, Wyoming big sagebrush, and scattered Utah juniper are the main shrubs and trees.

The total potential annual production, air-dry weight, of this plant community ranges from 1,000 pounds per acre in years of favorable growth conditions to 600 pounds per acre in years of below average growing conditions. About 30 percent of the yield can be used as forage and browse for cattle, and about 35 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial plants, especially Indian ricegrass, needleandthread, western wheatgrass, and antelope bitterbrush, and increases galleta, Wyoming big sagebrush, other shrubs, and Utah juniper. Plants that commonly invade the site include annual fescue, cheatgrass, and cactus.

This site can become dominated by Utah juniper very easily , and proper management is necessary to slow this trend. Proper grazing use and a planned grazing system can accomplish this.

Sandy Swale #429 Range Site

The annual precipitation is approximately 10 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Basin wildrye, bottlebrush squirreltail, inland saltgrass, Sandberg bluegrass, slender wheatgrass, and western wheatgrass make up most of the annual production in the potential plant community of this site. Basin big sagebrush, black greasewood, and sandbar willow are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 2,500 pounds per acre in years of favorable growth conditions to 1,500 pounds per acre in years of below average growing conditions. About 35 percent of the yield can be used as forage and browse for cattle, and about 35 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial grasses, especially basin wildrye, slender wheatgrass, and western wheatgrass, and increases inland saltgrass and shrubs. Plants that commonly invade the site include curled dock, perfoliated pepperweed, kochia, and cheatgrass.

Since this site is very productive and is commonly near watering sources, the site is very susceptible to overgrazing by livestock. Fencing usually is not feasible. Herding can be successfully used to achieve proper grazing use. Deferred grazing and a planned grazing system can also be used to prevent range condition decline.

Semidesert Clay Loam #328 Range Site

The annual precipitation is approximately 11 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Western wheatgrass, bottlebrush squirreltail, and galleta make up most of the annual production in the potential plant community of this site. Other grasses are Saline wildrye, Indian ricegrass, muttongrass, and Sandberg bluegrass. Wyoming big sagebrush, fourwing saltbush, and shadscale are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 1,000 pounds per acre in years of favorable growth conditions to 500 pounds per acre in years of below average growing conditions. About 20 percent of the yield can be used as forage and browse for cattle, and about 35 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial grasses, especially western wheatgrass, Saline wildrye, muttongrass, and Sandberg bluegrass, and increases bottlebrush squirreltail, galleta, Wyoming big sagebrush, and other shrubs. Plants that commonly invade the site include Russian thistle, kochia, cheatgrass, dandelion, black greasewood, wavyleaf thistle, halogeton, and bur buttercup.

Brush management may be necessary on this site to improve range condition. This can be done by burning, mechanical, or chemical means. Proper grazing use, deferred grazing, and a planned grazing system will benefit the site.

Semidesert Juniper #329 Range Site

The annual precipitation is approximately 9 inches; most of this occurs during the late fall, winter, and early spring (October through April).

An overstory of Utah juniper and scattered pinyon pine with an understory of needleandthread, galleta, Indian ricegrass, black sagebrush, stickyleaf low rabbitbrush, and broom snakeweed make up most of the annual production in the potential plant community of this site.

The total potential annual production, air-dry weight, of this plant community ranges from 350 pounds per acre in years of favorable growth conditions to 100 pounds per acre in years of below average growing conditions. About 40 percent of the yield can be used as forage and browse for sheep.

If grazing is the cause of range condition decline, then proper grazing use, deferred grazing, and a planned grazing system will improve the condition class. If the trees become too dense, thinning or burning can improve the understory vegetation.

Semidesert Loam #327 Range Site

The annual precipitation is approximately 10 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Galleta, Indian ricegrass, western wheatgrass and needleandthread make up most of the annual production in the potential plant community of this site. Other grasses are Nevada bluegrass, Sandberg bluegrass, and thickspike wheatgrass. The major forbs are Hoods phlox and others. Wyoming big sagebrush, shadscale, and winterfat are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 750 pounds per acre in years of favorable growth conditions to 500 pounds per acre in years of below average growing conditions. About 20 percent of the yield can be used as forage and browse for cattle, and about 35 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial plants, especially Indian ricegrass, needleandthread, western wheatgrass, and winterfat, and increases galleta, Hoods phlox, Wyoming big sagebrush, and other shrubs. Plants that commonly invade the site include bulbous bluegrass, black greasewood, cheatgrass, Russian thistle, perfoliated pepper weed, and Utah juniper.

Brush management may be necessary on this site to improve range condition. This can be done by burning, mechanical, or chemical means. Proper grazing use, deferred grazing, and a planned grazing system will benefit the site.

Semidesert Sandy Loam #326 Range Site

The annual precipitation is approximately 10 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Indian ricegrass, galleta, and needleandthread make up most of the annual production in the potential plant community of this site. Other grasses are streambank wheatgrass, sand dropseed, and Saline wildrye. Wyoming big sagebrush, fourwing saltbush, and small low rabbitbrush are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 850 pounds per acre in years of favorable growth conditions to 500 pounds per acre in years of below average growing conditions. About 15 percent of the yield can be used as forage and browse for cattle, and about 25 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial plants, especially Indian ricegrass, needleandthread, and fourwing saltbush, and increases galleta, sand dropseed, Wyoming big sagebrush, and other shrubs. Plants that commonly invade the site include cheatgrass, crested wheatgrass, and mustard.

Brush management may be necessary on this site to improve range condition. This can be done by burning, mechanical, or chemical means. Proper grazing use, deferred grazing, and a planned grazing system will benefit the site.

Shale 9-11 #430 Range Site

The annual precipitation is approximately 9 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Streambank wheatgrass, thickspike wheatgrass, bottlebrush squirreltail, Indian ricegrass, galleta, and alkali sacaton make up most of the annual production in the potential plant community of this site. The major forbs are Hoods phlox and scarlet globemallow. Wyoming big sagebrush, Nuttall horsebrush, Gardner saltbush, bud sagebrush, and shadscale are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 450

pounds per acre in years of favorable growth conditions to 200 pounds per acre in years of below average growing conditions. About 20 percent of the yield can be used as forage and browse for cattle, and about 30 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial plants, especially Indian ricegrass, Sandberg bluegrass, thickspike wheatgrass, Gardner saltbush, bud sagebrush, shadscale, and Wyoming big sagebrush, and increases black greasewood, green plume rabbitbrush, spiny horsebrush, and other shrubs. Plants that commonly invade the site include cheatgrass, halogeton, mustard, annual buckwheat, tarweed, and borage.

This site is so droughty that seeding to improve range condition generally is not successful. This site does not usually produce enough vegetation to use burning as a method of brush management. Brush management usually is not desirable since the shrubs are valuable forage during the winter. The best methods of improving range condition and plant vigor include proper grazing use, deferment, and a planned grazing system.

Shallow Slopes #307 Range Site

The annual precipitation is approximately 12 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Western wheatgrass, streambank wheatgrass, and bluebunch wheatgrass make up most of the annual production in the potential plant community of this site. Other grasses are bottlebrush squirreltail, needleandthread, and muttongrass. Winterfat, black sagebrush, and Wyoming big sagebrush are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 800 pounds per acre in years of favorable growth conditions to 500 pounds per acre in years of below average growing conditions. About 20 percent of the yield can be used as forage and browse for cattle, and about 25 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial plants, especially western wheatgrass, bluebunch wheatgrass, needleandthread, and winterfat, and increases black sagebrush, Wyoming big sagebrush, and other shrubs. Plants that commonly invade the site include cheatgrass.

Brush management may be necessary on this site to improve range condition. This can be done by burning, mechanical, or chemical means. Proper grazing use, deferred grazing, and a planned grazing system will benefit the site.

Silty Swale #433 Range Site

The annual precipitation is approximately 10 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Thickspike wheatgrass, western wheatgrass, and streambank wheatgrass make up most of the annual production in the potential plant community of this site. Other grasses are basin wildrye, Nevada bluegrass, and Sandberg bluegrass. Wyoming big sagebrush, Gardners saltbush, basin big sagebrush, and winterfat are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 1,000 pounds per acre in years of favorable growth conditions to 700 pounds per acre in years of below average growing conditions. About 20 percent of the yield can be used as forage and browse for cattle, and about 30 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial plants, especially western wheatgrass, Nevada bluegrass, and winterfat, and increases Wyoming big sagebrush, basin big sagebrush, and other shrubs. Plants that commonly invade the site include halogeton, perfoliated pepperweed, and cheatgrass.

This site occupies small areas within large unproductive areas, and thus generally receives heavy grazing pressure and is in poor condition. Where basin big sagebrush and Wyoming big sagebrush are dominant, brush management can improve range condition and reduce erosion. Proper grazing use, deferred grazing, and a planned grazing system are necessary to maintain or improve range condition.

Stony Loam #237 Range Site

The annual precipitation is approximately 17 inches; most of this occurs during the late fall, winter, and early spring (October through April).

Bluebunch wheatgrass, Indian ricegrass, needleandthread, Letterman needlegrass, and muttongrass make up most of the annual production in the potential plant community of this site. Mountain big sagebrush, Saskatoon serviceberry, mountain snowberry, and antelope bitterbrush are the main shrubs.

The total potential annual production, air-dry weight, of this plant community ranges from 2,000 pounds per acre in years of favorable growth conditions to 1,000 pounds per acre in years of

below average growing conditions. About 20 percent of the yield can be used as forage and browse for cattle, and about 25 percent can be used for sheep.

Continued overgrazing reduces the percentage of the more palatable perennial grasses, especially bluebunch wheatgrass, Indian ricegrass, needleandthread, and muttongrass, and increases mountain big sagebrush, Saskatoon serviceberry, mountain snowberry, and other shrubs. Plants that commonly invade the site include tarweed, hounds tongue, Canada thistle, cheatgrass, stickseed, and knotweed.

This site responds well to brush management, which may be accomplished by mechanical, chemical, or burning methods. Proper grazing use, a deferred grazing system, and a planned grazing system also improve the condition of this range site.

Forestland Productivity and Forestland Understory Vegetation

Forest Productivity

In Table 7, the *potential productivity* of merchantable or *common trees* on a soil is expressed as a site index. The *site index* is the average height, in feet, that dominant and codominant trees of a given species attain in a specified number of years. Site index is expressed in a different way for species of pinyon and juniper. For these tree species site index is the basal area attained when trees in a stand average 5 inches in diameter (Howell, 1940). The site index applies to fully stocked, even-aged, unmanaged stands. Commonly grown trees are those that forest managers generally favor in intermediate or improvement cuttings. They are selected on the basis of growth rate, quality, value, and marketability. More detailed information regarding site index is available in the “National Forestry Manual,” which is available in local offices of the Natural Resources Conservation Service or on the Internet.

Forestland Understory Vegetation

Forestland understory vegetation consists of grasses, forbs, shrubs, and other plants. If well managed, some forestland can produce enough understory vegetation to support grazing of livestock or wildlife, or both, without damage to the trees.

The quantity and quality of understory vegetation vary with the kind of soil, the age and kind of trees in the canopy, the density of the canopy, and the depth and condition of the litter. The density of the canopy determines the amount of light that understory plants receive.

Table 7 shows, for each soil suitable for forestland, the potential for producing understory vegetation. The total production of understory vegetation includes the herbaceous plants and the leaves, twigs, and fruit of woody plants up to a height of 4.5 feet. It is expressed in pounds per acre of air-dry vegetation in favorable, normal, and unfavorable years. In a favorable year, soil moisture is above average during the optimum part of the growing season; in a normal year, soil moisture is average; and in an unfavorable year, it is below average.

The table also lists the common names of the characteristic vegetation on each soil and the *composition*, by percentage of air-dry weight, of each kind of plant. The table shows the kind and percentage of understory plants expected under a canopy density that is most nearly typical of forestland in which the production of wood crops is highest.

Recreation

The soils of the survey area are rated in Tables 8 and 9 according to limitations that affect their suitability for recreation. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the recreational uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The ratings in the tables are based on restrictive soil features, such as wetness, slope, and texture of the surface layer. Susceptibility to flooding is considered. Not considered in the ratings, but

important in evaluating a site, are the location and accessibility of the area, the size and shape of the area and its scenic quality, vegetation, access to water, potential water impoundment sites, and access to public sewer lines. The capacity of the soil to absorb septic tank effluent and the ability of the soil to support vegetation also are important. Soils that are subject to flooding are limited for recreational uses by the duration and intensity of flooding and the season when flooding occurs. In planning recreational facilities, onsite assessment of the height, duration, intensity, and frequency of flooding is essential.

The information in Tables 8 and 9 can be supplemented by other information in this survey, for example, interpretations for building site development, construction materials, sanitary facilities, and water management.

Camp areas require site preparation, such as shaping and leveling the tent and parking areas, stabilizing roads and intensively used areas, and installing sanitary facilities and utility lines. Camp areas are subject to heavy foot traffic and some vehicular traffic. The ratings are based on the soil properties that affect the ease of developing camp areas and the performance of the areas after development. Slope, stoniness, and depth to bedrock or a cemented pan are the main concerns affecting the development of camp areas. The soil properties that affect the performance of the areas after development are those that influence trafficability and promote the growth of vegetation, especially in heavily used areas. For good trafficability, the surface of camp areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Picnic areas are subject to heavy foot traffic. Most vehicular traffic is confined to access roads and parking areas. The ratings are based on the soil properties that affect the ease of developing picnic areas and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of picnic areas. For good trafficability, the surface of picnic areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Playgrounds require soils that are nearly level, are free of stones, and can withstand intensive foot traffic. The ratings are based on the soil properties that affect the ease of developing playgrounds and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of playgrounds. For good trafficability, the surface of the playgrounds should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a water table, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Paths and trails for hiking and horseback riding should require little or no slope modification through cutting and filling. The ratings are based on the soil properties that affect trafficability and erodibility. These properties are stoniness, depth to a water table, ponding, flooding, slope, and texture of the surface layer.

Off-road motorcycle trails require little or no site preparation. They are not covered with surfacing material or vegetation. Considerable compaction of the soil material is likely. The ratings are based on the soil properties that influence erodibility, trafficability, dustiness, and the ease of revegetation. These properties are stoniness, slope, depth to a water table, ponding, flooding, and texture of the surface layer.

Golf fairways are subject to heavy foot traffic and some light vehicular traffic. Cutting or filling may be required. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction; depth to a water table; ponding; depth to bedrock or a cemented pan; the available water capacity in the upper 40 inches; the content of salts, sodium, or calcium carbonate; and sulfidic materials. The properties that affect trafficability are flooding, depth to a water table, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer. The suitability of the soil for traps, tees, roughs, and greens is not considered in the ratings.

Wildlife

Edward L. Neilson, Jr., Biologist, Natural Resources Conservation Service, helped to prepare this section.

Wildlife is a valuable resource of the survey area. Moffat County has as diverse fauna as any county in the state. The soils support habitats that vary from sparse cold deserts to subalpine forest. Game species common to the area are elk, mule deer, pronghorn, black bear, Rocky Mountain bighorn sheep, two species of cottontail rabbit, blue grouse, sage grouse, chukar, Canada goose, mallard, and other species of waterfowl. Important predators in the area are mountain lions, coyotes, badgers, bobcats, gray fox, striped skunks, martens, minks, long-tailed weasels, raccoons, bald eagles, golden eagles, red-tailed hawks, American kestrals, ferruginous hawks, Cooper's hawks, prairie falcons, great horned owls, long-eared owls, western rattlesnakes, and several other species of snakes and lizards. Wild horses occur in isolated areas in the survey area.

The Yampa, Green, and Little Snake Rivers and their tributaries contain a variety of fish species including Rocky Mountain whitefish, rainbow trout, brook trout, brown trout, native cutthroat, roundtail chub, northern pike, humpbacked chub, and Colorado squawfish.

Various non-game species also inhabit the survey area. Among these are several species of hummingbirds, many species of native songbirds, white-tailed jackrabbit, beaver, yellow-bellied marmot, chipmunks, raven, magpie, and turkey buzzards. Rodents, including muskrat, porcupine, white-tailed prairie dog, ground squirrel, and mice also inhabit all or parts of the survey area. The survey area has present or potential habitat for many state and Federally classified threatened and/or endangered species including Colorado River cutthroat, razorback sucker, bonytail chub, humpback chub, Colorado squawfish, peregrine falcon, whooping crane, greater sandhill crane, and black-footed ferret.

Wildlife Habitat

Soils affect the kind and amount of vegetation that is available to wildlife as food and cover. They also affect the construction of water impoundments. The kind and abundance of wildlife depend largely on the amount and distribution of food, cover, and water. Wildlife habitat can be created or improved by planting appropriate vegetation, by maintaining the existing plant cover, or by promoting the natural establishment of desirable plants.

In Table 10, the soils in the survey area are rated according to their potential for providing habitat for various kinds of wildlife. This information can be used in planning parks, wildlife refuges, nature study areas, and other developments for wildlife; in selecting soils that are suitable for establishing, improving, or maintaining specific elements of wildlife habitat; and in determining the intensity of management necessary for each element of the habitat.

The potential of the soil is rated good, fair, poor, or very poor. A rating of *good* indicates that the element or kind of habitat is easily established, improved, or maintained. Few or no limitations affect management, and satisfactory results can be expected. A rating of *fair* indicates that the element or kind of habitat can be established, improved, or maintained in most places. Moderately intensive management is required for satisfactory results. A rating of *poor* indicates that limitations are severe for the designated element or kind of habitat. Habitat can be created, improved, or maintained in most places, but management is difficult and must be intensive. A rating of *very poor* indicates that restrictions for the element or kind of habitat are very severe and that unsatisfactory results can be expected. Creating, improving, or maintaining habitat is impractical or impossible.

The elements of wildlife habitat are described in the following paragraphs.

Grain and seed crops are domestic grains and seed-producing herbaceous plants. Soil properties and features that affect the growth of grain and seed crops are depth of the root zone, texture of the surface layer, available water capacity, wetness, slope, surface stoniness, and flooding. Soil temperature and soil moisture also are considerations. Examples of grain and seed crops are corn, wheat, oats, and barley.

Grasses and legumes are domestic perennial grasses and herbaceous legumes. Soil properties and features that affect the growth of grasses and legumes are depth of the root zone, texture of the surface layer, available water capacity, wetness, surface stoniness, flooding, and slope. Soil temperature and soil moisture also are considerations. Examples of grasses and legumes are fescue, lovegrass, bromegrass, clover, and alfalfa.

Wild herbaceous plants are native or naturally established grasses and forbs, including weeds. Soil properties and features that affect the growth of these plants are depth of the root zone, texture of the surface layer, available water capacity, wetness, surface stoniness, and flooding. Soil temperature and

soil moisture also are considerations. Examples of wild herbaceous plants are cheatgrass, needlegrass, wheatgrass, balsam root, and lupine.

Hardwood trees and woody understory produce nuts or other fruit, buds, catkins, twigs, bark, and foliage. Soil properties and features that affect the growth of hardwood trees and shrubs are depth of the root zone, available water capacity, and wetness. Examples of these plants are narrowleaf cottonwood and aspen.

Coniferous plants furnish browse and seeds. Soil properties and features that affect the growth of coniferous trees, shrubs, and ground cover are depth of the root zone, available water capacity, and wetness. Examples of coniferous plants are pine, spruce, fir, and juniper.

Shrubs are bushy woody plants that produce fruit, buds, twigs, bark, and foliage. Soil properties and features that affect the growth of shrubs are depth of the root zone, available water capacity, salinity, and soil moisture. Examples of shrubs are mountainmahogany, bitterbrush, serviceberry, snowberry, saltbush, and big sagebrush.

Wetland plants are annual and perennial wild herbaceous plants that grow on moist or wet sites. Submerged or floating aquatic plants are excluded. Soil properties and features affecting wetland plants are texture of the surface layer, wetness, reaction, salinity, slope, and surface stoniness. Examples of wetland plants are smartweed, saltgrass, willow, rushes, sedges, and cattails.

Shallow water areas have an average depth of less than 5 feet. Some are naturally wet areas. Others are created by dams, levees, or other water-control structures. Soil properties and features affecting shallow water areas are depth to bedrock, wetness, surface stoniness, slope, and permeability. Examples of shallow water areas are marshes, waterfowl feeding areas, and ponds.

The habitat for various kinds of wildlife is described in the following paragraphs.

Habitat for openland wildlife consists of cropland, pasture, meadows, and areas that are overgrown with grasses, herbs, shrubs, and vines. These areas produce grain and seed crops, grasses and legumes, and wild herbaceous plants. Wildlife attracted to these areas include bobwhite quail, pheasant, meadowlark, field sparrow, cottontail, and red fox.

Habitat for woodland wildlife consists of areas of deciduous and/or coniferous plants and associated grasses, legumes, and wild herbaceous plants. Wildlife attracted to these areas include wild turkey, ruffed grouse, woodcock, thrushes, woodpeckers, squirrels, gray fox, raccoon, deer, elk, and bear.

Habitat for wetland wildlife consists of open, marshy or swampy shallow water areas. Some of the wildlife attracted to such areas are ducks, geese, herons, shore birds, muskrat, mink, and beaver.

Habitat for rangeland wildlife consists of areas of shrubs and wild herbaceous plants. Wildlife attracted to rangeland include antelope, deer, elk, sage grouse, meadowlark, and lark bunting.

Engineering

This section provides information for planning land uses related to urban development and to water management. Soils are rated for various uses, and the most limiting features are identified. Ratings are given for building site development, sanitary facilities, construction materials, and water management. The ratings are based on observed performance of the soils and on the data in the tables described under the heading “Soil Properties.”

Information in this section is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil between the surface and a depth of 5 to 7 feet. Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.

The information is not site specific and does not eliminate the need for onsite investigation of the soils or for testing and analysis by personnel experienced in the design and construction of engineering works.

Government ordinances and regulations that restrict certain land uses or impose specific design criteria were not considered in preparing the information in this section. Local ordinances and regulations should be considered in planning, in site selection, and in design.

Soil properties, site features, and observed performance were considered in determining the ratings in this section. During the fieldwork for this soil survey, determinations were made about particle-size distribution, liquid limit, plasticity index, soil reaction, depth to bedrock, hardness of bedrock within 5 to 7 feet of the surface, soil wetness, depth to a water table, ponding, slope, likelihood of flooding, natural soil structure aggregation, and soil density. Data were collected about kinds of clay minerals, mineralogy of the sand and silt fractions, and the kinds of adsorbed cations. Estimates were made for erodibility, permeability, corrosivity, shrink-swell potential, available water capacity, and other behavioral characteristics affecting engineering uses.

This information can be used to evaluate the potential of areas for residential, commercial, industrial, and recreational uses; make preliminary estimates of construction conditions; evaluate alternative routes for roads, streets, highways, pipelines, and underground cables; evaluate alternative sites for sanitary landfills, septic tank absorption fields, and sewage lagoons; plan detailed onsite investigations of soils and geology; locate potential sources of gravel, sand, earthfill, and topsoil; plan drainage systems, irrigation systems, ponds, terraces, and other structures for soil and water conservation; and predict performance of proposed small structures and pavements by comparing the performance of existing similar structures on the same or similar soils.

The information in the tables, along with the soil maps, the soil descriptions, and other data provided in this survey, can be used to make additional interpretations.

Some of the terms used in this soil survey have a special meaning in soil science and are defined in the Glossary.

Building Site Development

Soil properties influence the development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. Tables 11 and 12 show the degree and kind of soil limitations that affect dwellings with and without basements, small commercial buildings, local roads and streets, shallow excavations, and lawns and landscaping.

The ratings in the tables are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect building site development. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet. The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Small commercial buildings are structures that are less than three stories high and do not have basements. The foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. The ratings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility (which is inferred from the Unified classification). The properties that affect the ease and amount of excavation include flooding, depth to a water table, ponding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Local roads and streets have an all-weather surface and carry automobile and light truck traffic all year. They have a subgrade of cut or fill soil material; a base of gravel, crushed rock, or soil material stabilized by lime or cement; and a surface of flexible material (asphalt), rigid material (concrete), or gravel with a binder. The ratings are based on the soil

properties that affect the ease of excavation and grading and the traffic-supporting capacity. The properties that affect the ease of excavation and grading are depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, depth to a water table, ponding, flooding, the amount of large stones, and slope. The properties that affect the traffic-supporting capacity are soil strength (as inferred from the AASHTO group index number), subsidence, linear extensibility (shrink-swell potential), the potential for frost action, depth to a water table, and ponding.

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet for graves, utility lines, open ditches, or other purposes. The ratings are based on the soil properties that influence the ease of digging and the resistance to sloughing. Depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, the amount of large stones, and dense layers influence the ease of digging, filling, and compacting. Depth to the seasonal high water table, flooding, and ponding may restrict the period when excavations can be made. Slope influences the ease of using machinery. Soil texture, depth to the water table, and linear extensibility (shrink-swell potential) influence the resistance to sloughing.

Lawns and landscaping require soils on which turf and ornamental trees and shrubs can be established and maintained. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction; depth to a water table; ponding; depth to bedrock or a cemented pan; the available water capacity in the upper 40 inches; the content of salts, sodium, or calcium carbonate; and sulfidic materials. The properties that affect trafficability are flooding, depth to a water table, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer.

Sanitary Facilities

Tables 13 and 14 show the degree and kind of soil limitations that affect septic tank absorption fields, sewage lagoons, sanitary landfills, and daily cover for landfill. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Septic tank absorption fields are areas in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. Only that part of the soil between depths of 24 and 60 inches is evaluated. The ratings are based on the soil properties that affect absorption of the effluent, construction and maintenance of the system, and public health. Permeability, depth to a water table, ponding, depth to bedrock or a cemented pan, and flooding affect absorption of the effluent. Stones and boulders, ice, and bedrock or a cemented pan interfere with installation. Subsidence interferes with installation and maintenance. Excessive slope may cause lateral seepage and surfacing of the effluent in downslope areas.

Some soils are underlain by loose sand and gravel or fractured bedrock at a depth of less than 4 feet below the distribution lines. In these soils the absorption field may not adequately filter the effluent, particularly when the system is new. As a result, the ground water may become contaminated.

Sewage lagoons are shallow ponds constructed to hold sewage while aerobic bacteria decompose the solid and liquid wastes. Lagoons should have a nearly level floor surrounded by cut slopes or embankments of compacted soil. Nearly impervious soil material for the lagoon floor and sides is required to minimize seepage and contamination of ground water. Considered in the ratings are slope, permeability, depth to a water table, ponding, depth to bedrock or a cemented pan, flooding, large stones, and content of organic matter.

Soil permeability is a critical property affecting the suitability for sewage lagoons. Most porous soils eventually become sealed when they are used as sites for sewage lagoons. Until sealing occurs, however, the hazard of pollution is severe. Soils that

have a permeability rate of more than 2 inches per hour are too porous for the proper functioning of sewage lagoons. In these soils, seepage of the effluent can result in contamination of the ground water. Ground water contamination is also a hazard if fractured bedrock is within a depth of 40 inches, if the water table is high enough to raise the level of sewage in the lagoon, or if floodwater overtops the lagoon.

A high content of organic matter is detrimental to proper functioning of the lagoon because it inhibits aerobic activity. Slope, bedrock, and cemented pans can cause construction problems, and large stones can hinder compaction of the lagoon floor. If the lagoon is to be uniformly deep throughout, the slope must be gentle enough and the soil material must be thick enough over bedrock or a cemented pan to make land smoothing practical.

A *trench sanitary landfill* is an area where solid waste is placed in successive layers in an excavated trench. The waste is spread, compacted, and covered daily with a thin layer of soil excavated at the site. When the trench is full, a final cover of soil material at least 2 feet thick is placed over the landfill. The ratings in the table are based on the soil properties that affect the risk of pollution, the ease of excavation, trafficability, and revegetation. These properties include permeability, depth to bedrock or a cemented pan, depth to a water table, ponding, slope, flooding, texture, stones and boulders, highly organic layers, soil reaction, and content of salts and sodium. Unless otherwise stated, the ratings apply only to that part of the soil within a depth of about 6 feet. For deeper trenches, onsite investigation may be necessary.

Hard, nonrippable bedrock, creviced bedrock, or highly permeable strata in or directly below the proposed trench bottom can affect the ease of excavation and the hazard of ground water pollution. Slope affects construction of the trenches and the movement of surface water around the landfill. It also affects the construction and performance of roads in areas of the landfill.

Soil texture and consistence affect the ease with which the trench is dug and the ease with which the soil can be used as daily or final cover. They determine the workability of the soil when dry and when wet. Soils that are plastic and sticky when wet are difficult to excavate, grade, or compact and are difficult to place as a uniformly thick cover over a layer of refuse.

The soil material used as the final cover for a trench landfill should be suitable for plants. It should not have excess sodium or salts and should not be too acid. The surface layer generally has the best workability, the highest content of organic matter, and the best potential for plants. Material from the surface layer should be stockpiled for use as the final cover.

In an *area sanitary landfill*, solid waste is placed in successive layers on the surface of the soil. The waste is spread, compacted, and covered daily with a thin layer of soil from a source away from the site. A final cover of soil material at least 2 feet thick is placed over the completed landfill. The ratings in the table are based on the soil properties that affect trafficability and the risk of pollution. These properties include flooding, permeability, depth to a water table, ponding, slope, and depth to bedrock or a cemented pan.

Flooding is a serious problem because it can result in pollution in areas downstream from the landfill. If permeability is too rapid or if fractured bedrock, a fractured cemented pan, or the water table is close to the surface, the leachate can contaminate the water supply. Slope is a consideration because of the extra grading required to maintain roads in the steeper areas of the landfill. Also, leachate may flow along the surface of the soils in the steeper areas and cause difficult seepage problems.

Daily cover for landfill is the soil material that is used to cover compacted solid waste in an area sanitary landfill. The soil material is obtained offsite, transported to the landfill, and spread over the waste. The ratings in the table also apply to the final cover for a landfill. They are based on the soil properties that affect workability, the ease of digging, and the ease of moving and spreading the material over the refuse daily during wet and dry periods. These properties include soil texture, depth to a water table, ponding, rock fragments, slope, depth to bedrock or a cemented pan, reaction, and content of salts, sodium, or lime.

Loamy or silty soils that are free of large stones and excess gravel are the best cover for a landfill. Clayey soils may be sticky and difficult to spread; sandy soils are subject to wind erosion.

Slope affects the ease of excavation and of moving the cover material. Also, it can influence runoff, erosion, and reclamation of the borrow area.

After soil material has been removed, the soil material remaining in the borrow area must be thick enough over bedrock, a cemented pan, or the water table to permit revegetation. The soil material used as the final cover for a landfill should be suitable for plants. It should not have excess sodium, salts, or lime, and should not be too acid.

Construction Materials

Tables 15 and 16 give information about the soils as potential sources of gravel, sand, topsoil, reclamation material, and roadfill. Normal compaction, minor processing, and other standard construction practices are assumed.

Sand and *gravel* are natural aggregates suitable for commercial use with a minimum of processing. They are used in many kinds of construction. Specifications for each use vary widely. In Table 15, only the likelihood of finding material in suitable quantity is evaluated. The suitability of the material for specific purposes is not evaluated, nor are factors that affect excavation of the material. The properties used to evaluate the soil as a source of sand or gravel are gradation of grain sizes (as indicated by the Unified classification of the soil), the thickness of suitable material, and the content of rock fragments. If the bottom layer of the soil contains sand or gravel, the soil is considered a likely source regardless of thickness. The assumption is that the sand or gravel layer below the depth of observation exceeds the minimum thickness.

The soils are rated *good, fair,* or *poor* as potential sources of sand and gravel. A rating of *good* or *fair* means that the source material is likely to be in or below the soil. The bottom layer and the thickest layer of the soils are assigned numerical ratings. These ratings indicate the likelihood that the layer is a source of sand or gravel. The number 0.00 indicates that the layer is a poor source. The number 1.00 indicates that the layer is a good source. A number between 0.00 and 1.00 indicates the degree to which the layer is a likely source.

The soils are rated *good, fair,* or *poor* as potential sources of topsoil, reclamation material, and roadfill. The features that limit the soils as sources of these materials are specified in the tables. The numerical ratings given after the specified features indicate the degree to which the features limit the soils as sources of topsoil, reclamation material, or roadfill. The lower the number, the greater the limitation.

Topsoil is used to cover an area so that vegetation can be established and maintained. The upper 40 inches of a soil is evaluated for use as topsoil. Also evaluated is the reclamation potential of the borrow area. The ratings are based on the soil properties that affect plant growth; the ease of excavating, loading, and spreading the material; and reclamation of the borrow area. Toxic substances, soil reaction, and the properties that are inferred from soil texture, such as available water capacity and fertility, affect plant growth. The ease of excavating, loading, and spreading is affected by rock fragments, slope, depth to a water table, soil texture, and thickness of suitable material. Reclamation of the borrow area is affected by slope, depth to a water table, rock fragments, depth to bedrock or a cemented pan, and toxic material.

The surface layer of most soils generally is preferred for topsoil because of its organic matter content. Organic matter greatly increases the absorption and retention of moisture and nutrients for plant growth.

Reclamation material is used in areas that have been drastically disturbed by surface mining or similar activities. When these areas are reclaimed, layers of soil material or unconsolidated geological material, or both, are replaced in a vertical sequence. The reconstructed soil favors plant growth. The ratings in the table do not apply to quarries and other mined areas that require an offsite source of reconstruction material. The ratings are based on the soil properties that affect erosion and stability of the surface and the productive potential of the reconstructed soil. These properties include the content of sodium, salts, and calcium carbonate; reaction; available water capacity; erodibility; texture; content of rock fragments; and content of organic matter and other features that affect fertility.

Roadfill is soil material that is excavated in one place and used in road embankments in another place. In this table, the soils are rated as a source of roadfill for low embankments, generally less than 6 feet high and less exacting in design than higher embankments.

The ratings are for the whole soil, from the surface to a depth of about 5 feet. It is assumed that soil layers will be mixed when the soil material is excavated and spread.

The ratings are based on the amount of suitable material and on soil properties that affect the ease of excavation and the performance of the material after it is in place. The thickness of the suitable material is a major consideration. The ease of excavation is affected by large stones, depth to a water table, and slope. How well the soil performs in place after it has been compacted and drained is determined by its strength (as inferred from the AASHTO classification of the soil) and linear extensibility (shrink-swell potential).

Water Management

Table 17 gives information on the soil properties and site features that affect water management. The degree and kind of soil limitations are given for pond reservoir areas; embankments, dikes, and levees;

and aquifer-fed excavated ponds. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Pond reservoir areas hold water behind a dam or embankment. Soils best suited to this use have low seepage potential in the upper 60 inches. The seepage potential is determined by the permeability of the soil and the depth to fractured bedrock or other permeable material. Excessive slope can affect the storage capacity of the reservoir area.

Embankments, dikes, and levees are raised structures of soil material, generally less than 20 feet high, constructed to impound water or to protect land against overflow. Embankments that have zoned construction (core and shell) are not considered. In this table, the soils are rated as a source of material for embankment fill. The ratings apply to the soil material below the surface layer to a depth of about 5 feet. It is assumed that soil layers will be uniformly mixed and compacted during construction.

The ratings do not indicate the ability of the natural soil to support an embankment. Soil properties to a depth even greater than the height of the embankment can affect performance and safety of the embankment. Generally, deeper onsite investigation is necessary to determine these properties.

Soil material in embankments must be resistant to seepage, piping, and erosion and have favorable compaction characteristics. Unfavorable features include less than 5 feet of suitable material and a high content of stones or boulders, organic matter, or salts or sodium. A high water table affects the amount of usable material. It also affects trafficability.

Aquifer-fed excavated ponds are pits or dugouts that extend to a ground water aquifer or to a depth below a permanent water table. Excluded are ponds that are fed only by surface runoff and embankment ponds that impound water 3 feet or more above the original surface. Excavated ponds are affected by depth to a permanent water table, permeability of the aquifer, and quality of the water as inferred from the salinity of the soil. Depth to bedrock and the content of large stones affect the ease of excavation.

Agricultural Waste Management

Soil properties are important considerations in areas where soils are used as sites for the treatment and disposal of organic waste and wastewater. Selection of soils with properties that favor waste management can help to prevent environmental damage.

Tables 18 and 19 show the degree and kind of soil limitations affecting the treatment of agricultural waste, including municipal and food-processing wastewater and effluent from lagoons or storage ponds. Municipal wastewater is the waste stream from a municipality. It contains domestic waste and may contain industrial waste. It may have received primary or secondary treatment. It is rarely untreated sewage. Food-processing wastewater results from the preparation of fruits, vegetables, milk, cheese, and meats for public consumption. In places it is high in content of sodium and chloride. In the context of these tables, the effluent in lagoons and storage ponds is from facilities used to treat or store food-processing wastewater or domestic or animal waste. Domestic and food-processing wastewater is very dilute, and the effluent from the facilities that treat or store it commonly is very low in content of carbonaceous and nitrogenous material; the content of nitrogen commonly ranges from 10 to 30 milligrams per liter. The wastewater from animal waste treatment lagoons or storage ponds, however, has much higher concentrations of these materials, mainly because the manure has not been diluted as much as the domestic waste. The content of nitrogen in this wastewater generally ranges from 50 to 2,000 milligrams per liter. When wastewater is applied, checks should be made to ensure that nitrogen, heavy metals, and salts are not added in excessive amounts.

The ratings in the tables are for waste management systems that not only dispose of and treat organic waste or wastewater but also are

beneficial to crops (application of manure and food-processing waste, application of sewage sludge, and disposal of wastewater by irrigation) and for waste management systems that are designed only for the purpose of wastewater disposal and treatment (overland flow of wastewater, rapid infiltration of wastewater, and slow rate treatment of wastewater).

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect agricultural waste management. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Application of manure and food-processing waste not only disposes of waste material but also can improve crop production by increasing the supply of nutrients in the soils where the material is applied. Manure is the excrement of livestock and poultry, and food-processing waste is damaged fruit and vegetables and the peelings, stems, leaves, pits, and soil particles removed in food preparation. The manure and food-processing waste are either solid, slurry, or liquid. Their nitrogen content varies. A high content of nitrogen limits the application rate. Toxic or otherwise dangerous wastes, such as those mixed with the lye used in food processing, are not considered in the ratings.

The ratings are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, the rate at which the waste is applied, and the method by which the waste is applied. The properties that affect absorption include permeability, depth to a water table, ponding, the sodium adsorption ratio, depth to bedrock or a cemented pan, and available water capacity. The properties that affect plant growth and microbial activity include reaction, the sodium adsorption ratio, salinity, and bulk density. The wind erodibility group, the soil erodibility factor K, and slope are considered in estimating the likelihood that wind erosion or water erosion will transport the waste material from the application site. Stones, cobbles, a water table, ponding, and flooding can hinder the application of waste. Permanently frozen soils are unsuitable for waste treatment.

Application of sewage sludge not only disposes of waste material but also can improve crop production by increasing the supply of nutrients in the soils where the material is applied. In the context of this table, sewage sludge is the residual product of the treatment of municipal sewage. The solid component consists mainly of cell mass, primarily bacteria cells that developed during secondary treatment and have incorporated soluble organics into their own bodies. The sludge has small amounts of sand, silt, and other solid debris. The content of nitrogen varies. Some sludge has constituents that are toxic to plants or hazardous to the food chain, such as heavy metals and exotic organic compounds, and should be analyzed chemically prior to use.

The content of water in the sludge ranges from about 98 percent to less than 40 percent. The sludge is considered liquid if it is more than about 90 percent water, slurry if it is about 50 to 90 percent water, and solid if it is less than about 50 percent water.

The ratings in the table are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, the rate at which the sludge is applied, and the method by which the sludge is applied. The properties that affect absorption, plant growth, and microbial activity include permeability, depth to a water table, ponding, the sodium adsorption ratio, depth to bedrock or a cemented pan, available water capacity, reaction, salinity, and bulk density. The wind erodibility group, the soil erodibility factor K, and slope are considered in estimating the likelihood that wind erosion or water erosion will transport the waste material from the application site. Stones, cobbles, a water table, ponding, and flooding can hinder the application of sludge. Permanently frozen soils are unsuitable for waste treatment.

Disposal of wastewater by irrigation not only disposes of municipal wastewater and wastewater from food-processing plants, lagoons, and storage ponds but also can improve crop production by increasing the amount of water available to crops. The ratings in the table are based on the soil

properties that affect the design, construction, management, and performance of the irrigation system. The properties that affect design and management include the sodium adsorption ratio, depth to a water table, ponding, available water capacity, permeability, slope, and flooding. The properties that affect construction include stones, cobbles, depth to bedrock or a cemented pan, depth to a water table, and ponding. The properties that affect performance include depth to bedrock or a cemented pan, bulk density, the sodium adsorption ratio, salinity, reaction, and the cation-exchange capacity, which is used to estimate the capacity of a soil to adsorb heavy metals. Permanently frozen soils are not suitable for disposal of wastewater by irrigation.

Overland flow of wastewater is a process in which wastewater is applied to the upper reaches of sloped land and allowed to flow across vegetated surfaces, sometimes called terraces, to runoff-collection ditches. The length of the run generally is 150 to 300 feet. The application rate ranges from 2.5 to 16.0 inches per week. It commonly exceeds the rate necessary for irrigation of cropland. The wastewater leaves solids and nutrients on the vegetated surfaces as it flows downslope in a thin film. Most of the water reaches the collection ditch, some is lost through evapotranspiration, and a small amount may percolate to the ground water.

The ratings in the table are based on the soil properties that affect absorption, plant growth, microbial activity, and the design and construction of the system. Reaction and the cation-exchange capacity affect absorption. Reaction, salinity, and the sodium adsorption ratio affect plant growth and microbial activity. Slope, permeability, depth to a water table, ponding, flooding, depth to bedrock or a cemented pan, stones, and cobbles affect design and construction. Permanently frozen soils are unsuitable for waste treatment.

Rapid infiltration of wastewater is a process in which wastewater applied in a level basin at a rate of 4 to 120 inches per week percolates through the soil. The wastewater may eventually reach the ground water. The application rate commonly exceeds the rate necessary for irrigation of cropland. Vegetation is not a necessary part of the treatment; hence, the basins may or may not be vegetated. The thickness of the soil material necessary for proper treatment of the wastewater is more than 72 inches. As a result, geologic and hydrologic investigation is necessary to ensure proper design and performance and to determine the risk of ground water pollution.

The ratings in the table are based on the soil properties that affect the risk of pollution and the design, construction, and performance of the system. Depth to a water table, ponding, flooding, and depth to bedrock or a cemented pan affect the risk of pollution and the design and construction of the system. Slope, stones, and cobbles also affect design and construction. Permeability and reaction affect performance. Permanently frozen soils are unsuitable for waste treatment.

Slow rate treatment of wastewater is a process in which wastewater is applied to land at a rate normally between 0.5 inch and 4.0 inches per week. The application rate commonly exceeds the rate necessary for irrigation of cropland. The applied wastewater is treated as it moves through the soil. Much of the treated water may percolate to the ground water, and some enters the atmosphere through evapotranspiration. The applied water generally is not allowed to run off the surface. Waterlogging is prevented either through control of the application rate or through the use of tile drains, or both.

The ratings in the table are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, and the application of waste. The properties that affect absorption include the sodium adsorption ratio, depth to a water table, ponding, available water capacity, permeability, depth to bedrock or a cemented pan, reaction, the cation-exchange capacity, and slope. Reaction, the sodium adsorption ratio, salinity, and bulk density affect plant growth and microbial activity. The wind erodibility group, the soil erodibility factor K, and slope are considered in estimating the likelihood of wind erosion or water erosion. Stones, cobbles, a water table, ponding, and flooding can hinder the application of waste. Permanently frozen soils are unsuitable for waste treatment.

Soil Properties

Data relating to soil properties are collected during the course of the soil survey.

Soil properties are ascertained by field examination of the soils and by laboratory index testing of some benchmark soils. Established standard procedures are followed. During the survey, many shallow borings are made and examined to identify and classify the soils and to delineate them on the soil maps. Samples are taken from some typical profiles and tested in the laboratory to determine particle-size distribution, plasticity, and compaction characteristics.

Estimates of soil properties are based on field examinations, on laboratory tests of samples from the survey area, and on laboratory tests of samples of similar soils in nearby areas. Tests verify field observations, verify properties that cannot be estimated accurately by field observation, and help to characterize key soils.

The estimates of soil properties are shown in tables. They include engineering index properties, physical and chemical properties, and pertinent soil and water features.

Engineering Index Properties

Table 20 gives the engineering classifications and the range of index properties for the layers of each soil in the survey area.

Depth to the upper and lower boundaries of each layer is indicated.

Texture is given in the standard terms used by the U.S. Department of Agriculture. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. "Loam," for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. If the content of particles coarser than sand is 15 percent or more, an appropriate modifier is added, for example, "gravelly." Textural terms are defined in the Glossary.

Classification of the soils is determined according to the Unified soil classification system (ASTM, 2001) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO, 2000).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to particle-size distribution of the fraction less than 3 inches in diameter and according to plasticity index, liquid limit, and organic matter content. Sandy and gravelly soils are identified as GW, GP, GM, GC, SW, SP, SM, and SC; silty and clayey soils as ML, CL, OL, MH, CH, and OH; and highly organic soils as PT. Soils exhibiting engineering properties of two groups can have a dual classification, for example, CL-ML.

The AASHTO system classifies soils according to those properties that affect roadway construction and maintenance. In this system, the fraction of a mineral soil that is less than 3 inches in diameter is classified in one of seven groups from A-1 through A-7 on the basis of particle-size distribution, liquid limit, and plasticity index. Soils in group A-1 are coarse grained and low in content of fines (silt and clay). At the other extreme, soils in group A-7 are fine grained. Highly organic soils are classified in group A-8 on the basis of visual inspection.

If laboratory data are available, the A-1, A-2, and A-7 groups are further classified as A-1-a, A-1-b, A-2-4, A-2-5, A-2-6, A-2-7, A-7-5, or A-7-6. As an additional refinement, the suitability of a soil as subgrade material can be indicated by a group index number. Group index numbers range from 0 for the best subgrade material to 20 or higher for the poorest. The AASHTO classification for soils tested, with group index numbers in parentheses, is given in Table 20.

Rock fragments larger than 10 inches in diameter and 3 to 10 inches in diameter are indicated as a percentage of the total soil on a dry-weight basis. The percentages are estimates determined mainly by converting volume percentage in the field to weight percentage.

Percentage (of soil particles) passing designated sieves is the percentage of the soil fraction less than 3 inches in diameter based on an ovendry weight. The sieves, numbers 4, 10, 40, and 200 (USA

Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters, respectively. Estimates are based on laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field.

Liquid limit and *plasticity index* (Atterberg limits) indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination.

The estimates of particle-size distribution, liquid limit, and plasticity index are generally rounded to the nearest 5 percent. Thus, if the ranges of gradation and Atterberg limits extend a marginal amount (1 or 2 percentage points) across classification boundaries, the classification in the marginal zone is generally omitted in the table.

Physical Properties

Table 21 shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Particle size is the effective diameter of a soil particle as measured by sedimentation, sieving, or micrometric methods. Particle sizes are expressed as classes with specific effective diameter class limits. The broad classes are sand, silt, and clay, ranging from the larger to the smaller.

Sand as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters in diameter. In Table 21, the estimated sand content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Silt as a soil separate consists of mineral soil particles that are 0.002 to 0.05 millimeter in diameter. In Table 21, the estimated silt content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. In Table 21, the estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of sand, silt, and clay affects the physical behavior of a soil. Particle size is important for engineering and agronomic interpretations, for determination of soil hydrologic qualities, and for soil classification.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, permeability, plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

Moist bulk density is the weight of soil (ovendry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at $^1/_3$- or $^1/_{10}$-bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

Permeability (K_{sat}) refers to the ability of a soil to transmit water or air. The term "permeability," as used in soil surveys, indicates saturated hydraulic conductivity (K_{sat}). The estimates in the table indicate the rate of water movement, in inches per hour, when the soil is saturated. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Permeability is considered in the design of soil drainage systems and septic tank absorption fields.

Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water

content of the clod at 1/3- or 1/10-bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. Volume change is influenced by the amount and type of clay minerals in the soil.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In Table 21, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of organic matter in a soil can be maintained by returning crop residue to the soil. Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms.

Erosion factors are shown in Table 21 as the K factor (Kw and Kf) and the T factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of several factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and permeability. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Erosion factor Kw indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Erosion factor Kf indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

Erosion factor T is an estimate of the maximum average annual rate of soil erosion by wind or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Wind erodibility groups are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. The groups are as follows:

1. Coarse sands, sands, fine sands, and very fine sands.
2. Loamy coarse sands, loamy sands, loamy fine sands, loamy very fine sands, ash material, and sapric soil material.
3. Coarse sandy loams, sandy loams, fine sandy loams, and very fine sandy loams.

4L. Calcareous loams, silt loams, clay loams, and silty clay loams.

4. Clays, silty clays, noncalcareous clay loams, and silty clay loams that are more than 35 percent clay.
5. Noncalcareous loams and silt loams that are less than 20 percent clay and sandy clay loams, sandy clays, and hemic soil material.
6. Noncalcareous loams and silt loams that are more than 20 percent clay and noncalcareous clay loams that are less than 35 percent clay.
7. Silts, noncalcareous silty clay loams that are less than 35 percent clay, and fibric soil material.
8. Soils that are not subject to wind erosion because of rock fragments on the surface or because of surface wetness.

Wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

Chemical Properties

Table 22 shows estimates of some chemical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Cation-exchange capacity is the total amount of extractable bases that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. Soils having a low cation-exchange capacity hold fewer cations and may require more frequent applications of fertilizer than soils having a high cation-exchange capacity. The ability to retain cations reduces the hazard of ground-water pollution.

Effective cation-exchange capacity refers to the sum of extractable bases plus aluminum expressed in terms of milliequivalents per 100 grams of soil. It is determined for soils that have pH of less than 5.5.

Soil reaction is a measure of acidity or alkalinity. The pH of each soil horizon is based on many field tests. For many soils, values have been verified by laboratory analyses. Soil reaction is important in selecting crops and other plants, in evaluating soil amendments for fertility and stabilization, and in determining the risk of corrosion.

Calcium carbonate equivalent is the percent of carbonates, by weight, in the fraction of the soil less than 2 millimeters in size. The availability of plant nutrients is influenced by the amount of carbonates in the soil. Incorporating nitrogen fertilizer into calcareous soils helps to prevent nitrite accumulation and ammonium-N volatilization.

Gypsum is expressed as a percent, by weight, of hydrated calcium sulfates in the fraction of the soil less than 20 millimeters in size. Gypsum is partially soluble in water. Soils that have a high content of gypsum may collapse if the gypsum is removed by percolating water.

Salinity is a measure of soluble salts in the soil at saturation. It is expressed as the electrical conductivity of the saturation extract, in millimhos per centimeter at 25 degrees C. Estimates are based on field and laboratory measurements at representative sites of nonirrigated soils. The salinity of irrigated soils is affected by the quality of the irrigation water and by the frequency of water application. Hence, the salinity of soils in individual fields can differ greatly from the value given in the table. Salinity affects the suitability of a soil for crop production, the stability of soil if used as construction material, and the potential of the soil to corrode metal and concrete.

Sodium adsorption ratio (SAR) is a measure of the amount of sodium (Na) relative to calcium (Ca) and magnesium (Mg) in the water extract from saturated soil paste. It is the ratio of the Na concentration divided by the square root of one-half of the Ca + Mg concentration. Soils that have SAR values of 13 or more may be characterized by an increased dispersion of organic matter and clay particles, reduced permeability and aeration, and a general degradation of soil structure.

Soil Features

Table 23 gives estimates of various soil features. The estimates are used in land use planning that involves engineering considerations.

A *restrictive layer* is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers. The table indicates the hardness and thickness of the restrictive layer, both of which significantly affect the ease of excavation. *Depth to top* is the vertical distance from the soil surface to the upper boundary of the restrictive layer.

Potential for frost action is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing. Frost action occurs when moisture moves into the freezing zone of the soil. Temperature, texture, density, permeability, content of organic matter, and depth to the water table are the most important factors considered in evaluating the potential for frost action. It is assumed that the soil is not insulated by vegetation or snow and is not artificially drained. Silty and highly structured, clayey soils that have a high water table in winter are the most susceptible to frost action. Well drained, very gravelly, or very sandy soils are the least susceptible. Frost heave and low soil strength during thawing cause damage to pavements and other rigid structures.

Risk of corrosion pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel or concrete. The rate of corrosion of uncoated steel is related to such factors as soil moisture, particle-size distribution, acidity, and electrical conductivity of the soil. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The steel or concrete in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than the steel or concrete in installations that are entirely within one kind of soil or within one soil layer.

For uncoated steel, the risk of corrosion, expressed as *low, moderate,* or *high,* is based on soil drainage class, total acidity, electrical resistivity near field capacity, and electrical conductivity of the saturation extract.

For concrete, the risk of corrosion also is expressed as *low, moderate,* or *high*. It is based on soil texture, acidity, and amount of sulfates in the saturation extract.

Water Features

Table 24 gives estimates of various water features. The estimates are used in land use planning that involves engineering considerations.

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The four hydrologic soil groups are:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas.

The *months* in the table indicate the portion of the year in which the feature is most likely to be a concern.

Water table refers to a saturated zone in the soil. Table 24 indicates, by month, depth to the top (*upper limit*) and base (*lower limit*) of the saturated zone in most years. Estimates of the upper and lower limits are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors or mottles (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

Ponding is standing water in a closed depression. Unless a drainage system is installed, the water is removed only by percolation, transpiration, or evaporation. Table 24 indicates *surface water depth* and the *duration* and *frequency* of ponding. Duration is expressed as *very brief* if less than 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, rare, occasional, and frequent. *None* means that ponding is not probable; *rare* that it is unlikely but possible under unusual weather conditions (the chance of ponding is nearly 0 percent to 5 percent in any year); *occasional* that it occurs, on the average, once or less in 2 years (the chance of ponding is 5 to 50 percent in any year); and *frequent* that it occurs, on the average, more than once in 2 years (the chance of ponding is more than 50 percent in any year).

Flooding is the temporary inundation of an area caused by overflowing streams, by runoff from adjacent slopes, or by tides. Water standing for short periods after rainfall or snowmelt is not considered flooding, and water standing in swamps and marshes is considered ponding rather than flooding.

Duration and *frequency* are estimated. Duration is expressed as *extremely brief* if 0.1 hour to 4 hours, *very brief* if 4 hours to 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, very rare, rare, occasional, frequent, and very frequent. *None* means that flooding is not probable; *very rare* that it is very unlikely but possible under extremely unusual weather conditions (the chance of flooding is less than 1 percent in any year); *rare* that it is unlikely but possible under unusual weather conditions (the chance of flooding is 1 to 5 percent in any year); *occasional* that it occurs infrequently under normal weather conditions (the chance of flooding is 5 to 50 percent in any year); *frequent* that it is likely to occur often under normal weather conditions (the chance of flooding is more than 50 percent in any year but is less than 50 percent in all months in any year); and *very frequent* that it is likely to occur very often under normal weather conditions (the chance of flooding is more than 50 percent in all months of any year).

The information is based on evidence in the soil profile, namely thin strata of gravel, sand, silt, or clay deposited by floodwater; irregular decrease in organic matter content with increasing depth; and little or no horizon development.

Also considered are local information about the extent and levels of flooding and the relation of each soil on the landscape to historic floods. Information

on the extent of flooding based on soil data is less specific than that provided by detailed engineering surveys that delineate flood-prone areas at specific flood frequency levels.

Classification of the Soils

The system of soil classification used by the National Cooperative Soil Survey has six categories (Soil Survey Staff, 1998 and 1999). Beginning with the broadest, these categories are the order, suborder, great group, subgroup, family, and series. Classification is based on soil properties observed in the field or inferred from those observations or from laboratory measurements. Table 25 shows the classification of the soils in the survey area. The categories are defined in the following paragraphs.

ORDER. Twelve soil orders are recognized. The differences among orders reflect the dominant soil-forming processes and the degree of soil formation. Each order is identified by a word ending in *sol*. An example is Aridisol.

SUBORDER. Each order is divided into suborders primarily on the basis of properties that influence soil genesis and are important to plant growth or properties that reflect the most important variables within the orders. The last syllable in the name of a suborder indicates the order. An example is Argid (*Arg*, meaning modified from argillic horizon, plus *id*, from Aridisol).

GREAT GROUP. Each suborder is divided into great groups on the basis of close similarities in kind, arrangement, and degree of development of pedogenic horizons; soil moisture and temperature regimes; type of saturation; and base status. Each great group is identified by the name of a suborder and by a prefix that indicates a property of the soil. An example is Haplargids (*Hapl*, meaning minimal horizonation, plus *argid*, the suborder of the Aridisols that has an argillic horizon).

SUBGROUP. Each great group has a typic subgroup. Other subgroups are intergrades or extragrades. The typic subgroup is the central concept of the great group; it is not necessarily the most extensive. Intergrades are transitions to other orders, suborders, or great groups. Extragrades have some properties that are not representative of the great group but do not indicate transitions to any other taxonomic class. Each subgroup is identified by one or more adjectives preceding the name of the great group. The adjective *Typic* identifies the subgroup that typifies the great group. An example is Typic Haplargids.

FAMILY. Families are established within a subgroup on the basis of physical and chemical properties and other characteristics that affect management. Generally, the properties are those of horizons below plow depth where there is much biological activity. Among the properties and characteristics considered are particle-size class, mineralogy class, cation-exchange activity class, soil temperature regime, soil depth, and reaction class. A family name consists of the name of a subgroup preceded by terms that indicate soil properties. An example is fine-loamy, mixed, mesic Typic Haplargids.

SERIES. The series consists of soils within a family that have horizons similar in color, texture, structure, reaction, consistence, mineral and chemical composition, and arrangement in the profile.

Soil Series and Their Morphology

In this section, each soil series recognized in the survey area is described. Characteristics of the soil and the material in which it formed are identified for each series. A pedon, a small three-dimensional area of soil, that is typical of the series in the survey area is described. The detailed description of each soil horizon follows standards in the “Soil Survey Manual” (Soil Survey Division Staff, 1993). Many of the technical terms used in the descriptions are defined in “Soil Taxonomy” (Soil Survey Staff, 1999) and in “Keys to Soil Taxonomy” (Soil Survey Staff, 1998). Unless otherwise indicated, colors in the descriptions are for dry soil. Following the pedon description is the range of important characteristics of the soils in the series.

Soil Taxons and Their Morphology

In this section, each soil series, or taxon, recognized in the survey area is described. Characteristics of the soil and the material in which it formed are identified for each series or taxon. A

pedon, a small three-dimensional area of soil, which is typical of the series, or taxon, in the survey area is described. The detailed description of each soil horizon follows standards in the "Soil Survey Manual" (Soil Survey Division Staff, 1993). Many of the technical terms used in the description are defined in "Soil Taxonomy" (Soil Survey Staff, 1999) and in "Keys to Soil Taxonomy" (Soil Survey Staff, 1998). Pedons from the adjoining Dinosaur National Monument soil survey area were classified using the Seventh Edition, 1996 version of the "Keys to Soil Taxonomy." Pedons from the adjoining Uintah Area, Utah soil survey area were classified using the Eighth Edition, 1998 version of the "Keys to Soil Taxonomy." All other pedons in the survey area were classified using the Fourth Edition, 1990 version of the "Keys to Soil Taxonomy." Unless otherwise indicated, colors in the descriptions are for dry soil. Following the pedon description is the range of important characteristics of the soils in the series.

The map units of each soil series, or taxon, are described in the Detailed Soil Map Units section.

Abor Series

Map unit(s): 1, 2, 87
Depth class: moderately deep
Drainage class: well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Landform: hills, hillslopes
Parent material: residuum derived from shale
Elevation: 6,300 to 7,000 feet (1,920 to 2,134 meters)
Slope: 10 to 65 percent
Climatic data:
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine, montmorillonitic, frigid Udorthentic Chromusterts

Typical Pedon

Map unit in which located: Abor silty clay loam, 12 to 25 percent slopes
Location in the survey area: about 2,000 feet west and 2,700 feet south of the northeast corner of sec. 35, T. 7 N., R. 91 W.

A—0 to 4 inches; pale yellow (2.5Y 7/4) silty clay loam, light yellowish brown (2.5Y 6/4) moist; weak coarse subangular blocky structure parting to moderate fine subangular blocky; slightly hard, friable, sticky and plastic; strongly effervescent; moderately alkaline; abrupt smooth boundary.

Bw1—4 to 15 inches; light yellowish brown (2.5Y 6/4) silty clay, light olive brown (2.5Y 5/4) moist; moderate coarse subangular blocky structure parting to moderate medium subangular blocky; hard, firm, very sticky and very plastic; strongly effervescent; moderately alkaline; clear smooth boundary.

Bk—15 to 22 inches; light yellowish brown (2.5Y 6/4) silty clay, light olive brown (2.5Y 5/4) moist; moderate coarse subangular blocky structure parting to moderate medium subangular blocky; very hard, very firm, very sticky and very plastic; common slickensides; violently effervescent; common fine concentrations of calcium carbonate; moderately alkaline; clear wavy boundary.

Bky—22 to 37 inches; 70 percent light brownish gray (2.5Y 6/2) and 30 percent gray (2.5Y 6/0) silty clay, light brownish gray (2.5Y 6/2) moist; massive; very hard, very firm, sticky and plastic; common slickensides; few clusters of gypsum crystals; strongly effervescent; common fine concentrations of calcium carbonate; moderately alkaline; gradual wavy boundary.

Cr—37 to 60 inches; soft shale bedrock.

Range in Characteristics

Depth to effervescence: 0 to 10 inches; when the soil is dry, cracks are present from the surface to a depth of 20 to 30 inches and are 3/4 inch to 1 inch wide at a depth of 20 inches
Depth to paralithic contact: 20 to 40 inches

Abracon Series

Map unit(s): 225, 250, 267
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: fan remnants, hills, mesas
Position on landform: footslopes, toeslopes
Parent material: slope alluvium derived from sandstone, limestone, shale, and quartzite, strongly calcareous loamy alluvium
Elevation: 5,300 to 6,600 feet (1,615 to 2,012 meters)
Slope: 3 to 8 percent

Climatic data:
Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Frost-free period: 110 to 140 days

Taxonomic class: Coarse-loamy, mixed, superactive, mesic Ustic Haplocalcids

Typical Pedon

Map unit in which located: Abracon loam, 3 to 8 percent slopes, from the Uintah Area, Utah Soil Survey

Location in the Uintah Area, Utah survey area: about 3.2 miles southeast of Lapoint; 1,300 feet north and 100 feet east of the southwest corner of sec. 15, T. 5 S., R. 19 E., SLBM; Vernal N.W., Utah USGS quadrangle; latitude 40 degrees, 22 minutes, 44 seconds north and longitude 109 degrees, 44 minutes, 48 seconds west; NAD 27.

The soil surface is covered by 10 percent gravel.

A—0 to 4 inches; brown (7.5YR 5/4) loam, brown (7.5YR 4/4) moist; weak thin platy structure; soft, friable, slightly sticky and slightly plastic; many very fine and fine, common medium roots; many very fine and fine, common medium, few coarse vesicular pores; slightly effervescent; 5 percent calcium carbonate equivalent; calcium carbonate is disseminated; moderately alkaline (pH 8.0); abrupt smooth boundary. (The horizon ranges from 2 to 8 inches thick.)

Bw—4 to 10 inches; reddish yellow (7.5YR 6/6) loam, brown (7.5YR 4/4) moist; moderate fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine, common medium roots; common very fine and fine tubular pores; slightly effervescent; 7 percent calcium carbonate equivalent; calcium carbonate is disseminated; moderately alkaline (8.0); clear smooth boundary. (The horizon ranges from 4 to 14 inches thick.)

Bk1—10 to 21 inches; light brown (7.5YR 6/4) loam, brown (7.5YR 5/4) moist; moderate very fine and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine, few medium roots; common very fine and fine, few medium tubular pores; 10 percent gravel; strongly effervescent; 16 percent calcium carbonate equivalent; calcium carbonate is disseminated and in common irregular fine and medium masses; moderately alkaline (pH 8.2); clear wavy boundary.

Bk2—21 to 35 inches; pinkish white (7.5YR 8/2) loam, pink (7.5YR 7/4) moist; weak very fine and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine roots; common very fine and fine, few medium tubular pores; strongly effervescent; 47 percent calcium carbonate equivalent; calcium carbonate is disseminated and in common irregular medium and coarse masses and nodules; moderately alkaline (pH 8.2); clear wavy boundary.

Bk3—35 to 51 inches; pinkish white (7.5YR 8/2) loam, pink (7.5YR 7/3) moist; moderate fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; few very fine and fine roots; common very fine and fine, few medium tubular pores; 5 percent gravel; strongly effervescent; 17 percent calcium carbonate equivalent; calcium carbonate is disseminated and in common irregular medium masses and nodules; moderately alkaline (pH 8.4); gradual wavy boundary. (The combined thickness of the Bk horizons is 26 to 41 inches.)

C—51 to 60 inches; reddish yellow (7.5YR 6/6) loam, strong brown (7.5YR 5/6) moist; weak fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; few very fine and fine roots; common very fine and medium, few fine tubular pores; 5 percent gravel and 5 percent cobbles; slightly effervescent; 17 percent calcium carbonate equivalent; calcium carbonate is disseminated; moderately alkaline (pH 8.4).

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 13 to 18 percent silicate clay; 18 to 35 percent total clay
Rock fragment content: 0 to 15 percent rounded gravel and cobbles
Calcium carbonate equivalent: 15 to 40 percent
Depth to calcic horizon: 7 to 24 inches
Mean annual soil temperature: 47 to 52 degrees F.
Moisture control section: is affected by precipitation that falls evenly throughout the year with a slight increase in the late summer and fall
Moisture regime: aridic bordering on ustic
Note: Surface layers with mollic colors are not thick enough to qualify as a mollic epipedon.

A horizon:
Hue: 5YR to 10YR
Value: 4 to 6 dry, 3 to 5 moist
Chroma: 2 to 6 dry, 2 to 4 moist

Texture: loam or gravelly sandy loam
Rock fragment content: 0 to 35 percent
Calcium carbonate equivalent: 5 to 20 percent
Reaction: moderately alkaline or strongly alkaline

Bw horizon:
Hue: 5YR to 10YR
Value: 5 or 6 dry, 4 or 5 moist
Chroma: 3 to 6 dry or moist
Texture: loam or sandy loam
Rock fragment content: 0 to 15 percent
Calcium carbonate equivalent: 5 to 25 percent
Reaction: moderately alkaline or strongly alkaline

Bk horizon:
Hue: 5YR to 10YR
Value: 5 to 8 dry, 4 to 8 moist
Chroma: 2 to 6 dry or moist
Texture: loam, clay loam, or sandy loam
Rock fragment content: 0 to 15 percent gravel and cobbles
Calcium carbonate equivalent: 15 to 40 percent
Reaction: moderately alkaline or strongly alkaline

C horizon:
Hue: 5YR to 10YR
Value: 6 to 8 dry, 4 to 7 moist
Chroma: 3 to 6 dry or moist
Texture: loam, fine sandy loam, or sandy loam
Rock fragment content: 0 to 15 percent gravel and cobbles
Calcium carbonate equivalent: 5 to 25 percent
Reaction: moderately alkaline or strongly alkaline

Adderton Series

Map unit(s): 3
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: alluvial fans, drainageways
Parent material: alluvium derived from sedimentary rocks
Elevation: 7,000 to 8,500 feet (2,134 to 2,591 meters)
Slope: 1 to 10 percent
Climatic data:
Mean annual precipitation: 16 to 20 inches (406 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Frost-free period: 50 to 75 days
Taxonomic class: Fine-loamy, mixed Cumulic Cryoborolls

Typical Pedon

Map unit in which located: Adderton loam, 1 to 10 percent slopes
Location in the survey area: about 1,900 feet east and 900 feet north of the southwest corner of sec. 28, T. 12 N., R. 103 W.

A1—0 to 4 inches; very dark grayish brown (10YR 3/2) loam, very dark brown (10YR 2/2) moist; weak fine granular structure; soft, very friable, nonsticky and nonplastic; slightly acid; clear wavy boundary.
A2—4 to 11 inches; very dark gray (10YR 3/1) loam, black (10YR 2/1) moist; moderate medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; neutral; clear wavy boundary.
A3—11 to 22 inches; very dark gray (10YR 3/1) loam, black (10YR 2/1) moist; weak medium prismatic structure parting to strong coarse and medium angular blocky; hard, friable, slightly sticky and slightly plastic; neutral; clear wavy boundary.
C1—22 to 39 inches; dark grayish brown (10YR 4/2) loam, very dark grayish brown (10YR 3/2) moist; weak medium prismatic structure parting to moderate, medium and coarse angular blocky; slightly hard, friable, slightly sticky and slightly plastic; neutral; diffuse wavy boundary.
C2—39 to 60 inches; brown (10YR 4/3) fine sandy loam, very dark grayish brown (10YR 3/2) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; neutral.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 18 to 35 percent
Rock fragment content: 0 to 5 percent gravel; thin lenses containing 15 to 35 percent rock fragments occur in some pedons
Depth to effervescence: 40 inches or more
Thickness of the mollic epipedon: 16 to 60 inches

A3 and C1 horizons:
Texture: loam, sandy clay loam, or clay loam
Reaction: neutral or mildly alkaline

C2 horizon:
Hue: 10YR or 7.5YR

Texture: loam, sandy loam, or fine sandy loam
Reaction: neutral or mildly alkaline

Almy Series

Map unit(s): 4
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: alluvial fans, fan terraces
Parent material: loess and alluvium derived from sandstone
Elevation: 6,500 to 7,200 feet (1,981 to 2,194 meters)
Slope: 3 to 15 percent
Climatic data:
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine-loamy, mixed Borollic Haplargids

Typical Pedon

Map unit in which located: Almy loam, 3 to 15 percent slopes
Location in the survey area: about 2,600 feet east and 900 feet south of the northwest corner of sec. 19, T. 4 N., R. 100 W.

A—0 to 6 inches; brown (7.5YR 5/4) loam, reddish brown (5YR 4/3) moist; weak coarse subangular blocky structure parting to weak very fine subangular blocky; soft, very friable, slightly sticky and plastic; slightly effervescent; moderately alkaline; abrupt smooth boundary.
Bt—6 to 11 inches; yellowish red (5YR 6/6) clay loam, reddish brown (5YR 4/4) moist; weak medium subangular blocky structure; slightly hard, friable, slightly sticky and plastic; few faint clay films on faces of peds; strongly effervescent; moderately alkaline; clear smooth boundary.
Btk1—11 to 20 inches; yellowish red (5YR 5/4) clay loam, reddish brown (5YR 4/4) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; hard, firm, sticky and plastic; very few faint clay films on faces of peds; strongly effervescent; few fine concentrations of calcium carbonate; moderately alkaline; gradual smooth boundary.
Btk2—20 to 30 inches; yellowish red (5YR 6/6) clay loam, reddish brown (5YR 4/4) moist; weak medium subangular blocky structure parting to weak fine subangular blocky; slightly hard, friable, sticky and plastic; very few faint clay films on faces of peds; few fine concentrations of calcium carbonate; strongly effervescent; moderately alkaline; gradual smooth boundary.
Bk1—30 to 38 inches; yellowish red (5YR 6/6) loam, yellowish red (5YR 4/6) moist; weak coarse subangular blocky structure; hard, friable, sticky and plastic; common fine and medium concentrations of calcium carbonate; strongly effervescent; strongly alkaline; gradual smooth boundary.
Bk2—38 to 50 inches; yellowish red (5YR 6/6) loam, yellowish red (5YR 4/6) moist; massive; hard, friable, sticky and plastic; common fine and medium concentrations of calcium carbonate; strongly effervescent; strongly alkaline; gradual smooth boundary.
C—50 to 60 inches; reddish yellow (7.5YR 6/6) loam, yellowish red (5YR 4/6) moist; massive; slightly hard, friable, sticky and plastic; strongly effervescent; strongly alkaline.

Range in Characteristics

Depth to secondary calcium carbonate: 10 to 20 inches

A horizon:
Hue: 5YR or 7.5YR

Btk horizon:
Texture: loam or clay loam

Bk and C horizons:
Hue: 7.5YR or 5YR
Reaction: moderately alkaline or strongly alkaline

Anasazi Series

Map unit(s): 243
Depth class: moderately deep
Drainage class: well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: cuestas
Parent material: alluvium and/or colluvium over residuum weathered from limestone and sandstone
Elevation: 5,400 to 6,400 feet (1,646 to 1,951 meters)
Slope: 3 to 25 percent
Climatic data:
Mean annual precipitation: 10 to 12 inches (254 to 305 millimeters)

Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Frost-free period: 90 to 105 days

Taxonomic class: Coarse-loamy, mixed, superactive, mesic Ustic Haplocalcids

Typical Pedon

Map unit in which located: Windcomb-Rizno-Anasazi complex, 3 to 25 percent slopes, extremely flaggy, from the Dinosaur National Monument Soil Survey
Location in the Dinosaur National Monument survey area: about 900 feet east and 1,800 feet north of the southwest corner, section 2, T. 6 N., R. 103 W., NMPM latitude 40 degrees, 29 minutes, 55 seconds N. and longitude 108 degrees, 56 minutes, 38 seconds W.

The soil surface is covered with limestone rock fragments, consisting of 3 percent gravel and 1 percent cobbles.

A—0 to 3 inches; brown (7.5YR 5/3) fine sandy loam, dark brown (7.5YR 3/4) moist; weak fine granular structure; soft, very friable, slightly sticky and slightly plastic; many fine roots; common fine vesicular and tubular pores; 10 percent gravel and 3 percent cobbles; calcium carbonate is disseminated; strongly effervescent; 11 percent calcium carbonate equivalent; moderately alkaline; clear smooth boundary.
Bw—3 to 10 inches; brown (7.5YR 5/4) cobbly fine sandy loam, brown (7.5YR 4/4) moist; weak fine and medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; many fine roots; common fine vesicular and tubular pores; 10 percent gravel and 10 percent cobbles; calcium carbonate is disseminated; violently effervescent; 27 percent calcium carbonate equivalent; moderately alkaline; clear wavy boundary.
Bk—10 to 19 inches; light brown (7.5YR 6/4) gravelly fine sandy loam, brown (7.5YR 5/4) moist; weak medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; common fine roots; common fine vesicular and tubular pores; 20 percent gravel and 7 percent cobbles; common distinct calcium carbonate coatings on rock fragments; common fine and medium irregular calcium carbonate concretions; violently effervescent; 40 percent calcium carbonate equivalent; moderately alkaline; clear wavy boundary.
BCk—19 to 24 inches; light brown (7.5YR 6/4) very gravelly loamy sand, brown (7.5YR 5/4) moist; massive; soft, very friable, nonsticky and nonplastic; few fine roots; few fine vesicular and tubular pores; 35 percent gravel and 5 percent cobbles; few distinct calcium carbonate coatings on rock fragments; common fine and medium irregular calcium carbonate concretions; violently effervescent; 28 percent calcium carbonate equivalent; moderately alkaline; abrupt wavy boundary.
R—24 inches; hard limestone.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 5 to 18 percent
Rock fragment content: 15 to 35 percent
Calcium carbonate equivalent: 15 to 40 percent
Depth to bedrock: 20 to 40 inches
Depth to calcic horizon: 5 to 10 inches

A horizon:
Hue: 5YR or 7.5YR
Value: 5 or 6 dry, 3 to 5 moist
Chroma: 3 to 6
Texture: fine sandy loam, loam, or silt loam
Reaction: slightly alkaline or moderately alkaline

Bw horizon:
Hue: 5YR or 7.5YR
Value: 5 or 6 dry, 4 or 5 moist
Chroma: 3 to 6
Texture: fine sandy loam, loam, or silt loam modified by 0 to 35 percent gravel or cobbles
Reaction: moderately alkaline or strongly alkaline

Bk horizon:
Hue: 2.5YR to 7.5YR
Value: 5 or 6 dry, 4 or 5 moist
Chroma: 4 to 6
Texture: fine sandy loam, loam, or silt loam modified by 15 to 35 percent gravel or cobbles
Reaction: moderately alkaline or strongly alkaline

BCk horizon: (if present)
Hue: 2.5YR to 7.5YR
Value: 5 to 8 dry, 4 to 7 moist
Chroma: 2 to 6
Texture: loamy sand, loamy fine sand, fine sandy loam, loam, or silt loam modified by 15 to 40 percent gravel or cobbles
Reaction: moderately alkaline or strongly alkaline

C horizon:(if present)
Hue: 2.5YR to 7.5YR
Value: 5 or 6 dry, 4 or 5 moist
Chroma: 3 to 6
Texture: loamy sand, loamy fine sand, fine sandy

loam, loam, or silt loam modified by 15 to 60 percent gravel or cobbles
Reaction: moderately alkaline or strongly alkaline

Apmay Series

Map unit(s): 5
Depth class: very deep
Drainage class: somewhat poorly drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: flood plains
Parent material: alluvium derived from mixed sources
Elevation: 6,000 to 7,000 feet (1,829 to 2,134 meters)
Slope: 0 to 1 percent
Climatic data:
Mean annual precipitation: 13 to 16 inches (330 to 406 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine-loamy over sandy or sandy-skeletal, mixed Cumulic Haploborolls

Typical Pedon

Map unit in which located: Apmay clay loam, 0 to 1 percent slopes
Location in the survey area: about 200 feet west and 700 feet north of the southeast corner of sec. 34, T. 7 N., R. 90 W.

A1—0 to 10 inches; very dark grayish brown (10YR 3/2) clay loam, very dark brown (10YR 2/2) moist; strong fine granular and fine subangular blocky structure; hard, firm, sticky and plastic; mildly alkaline; clear smooth boundary.
A2—10 to 17 inches; grayish brown (10YR 5/2) clay loam, very dark grayish brown (10YR 3/2) moist; moderate medium and fine subangular blocky structure; hard, firm, sticky and plastic; mildly alkaline; gradual smooth boundary.
Bw1—17 to 27 inches; brown (10YR 5/3) clay loam stratified with a 1 inch thick layer of pale brown (10YR 6/3) loam, dark brown (10YR 3/3) moist; moderate medium subangular blocky structure; hard, friable, sticky and plastic; mildly alkaline; clear smooth boundary.
Bw2—27 to 30 inches; pale brown (10YR 6/3) loam, brown (10YR 4/3) moist; common fine prominent strong brown (7.5YR 5/6) mottles; weak medium subangular blocky structure; hard, friable, sticky and plastic; mildly alkaline; abrupt smooth boundary.
2C—30 to 60 inches; light yellowish brown (10YR 6/4) extremely gravelly sand, yellowish brown (10YR 5/4) moist; single grained; loose, nonsticky and nonplastic; 60 percent gravel, 10 percent cobbles; mildly alkaline.

Range in Characteristics

Depth to a seasonal high water table: 2 to 3 feet from April through June
Thickness of the mollic epipedon: 16 to 25 inches
Note: Some pedons may contain thin discontinuous horizons, which are slightly effervescent.

Bw and C horizons:
Texture: loam, sandy clay loam, or clay loam; thin layers less than 2 inches thick of sandy loam sometimes are present
Reaction: neutral or mildly alkaline
Note: Bw horizons are absent in some pedons.

2C horizon:
Texture: very gravelly sand or extremely gravelly sand; a layer of sand 2 to 10 inches thick may overlie these textures
Depth to the 2C horizon: 20 to 40 inches

Arches Series

Map unit(s): 226
Depth class: very shallow to shallow
Drainage class: excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Landform: hills
Position on landform: footslopes, toeslopes
Parent material: eolian deposits derived from sandstone
Elevation: 5,100 to 6,000 feet (1,554 to 1,829 meters)
Slope: 5 to 40 percent
Climatic data:
Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Frost-free period: 110 to 140 days

Taxonomic class: Mixed, mesic Lithic Torripsamments

Typical Pedon

Map unit in which located: Arches-Mespun-Rock outcrop complex, 4 to 40 percent slopes, from the Dinosaur National Monument Soil Survey
Location in the Dinosaur National Monument survey area: about 1,200 feet east and 800 feet south of the northwest corner of section 28, T. 3 S., R. 25 E., SLBM latitude 40 degrees, 32 minutes, 5 seconds N. and longitude 109 degrees, 7 minutes, 18 seconds W.

A—0 to 2 inches; brown (7.5YR 5/4) loamy fine sand; brown (7.5YR 4/4) moist; weak very fine and fine subangular blocky structure; soft, very friable, nonsticky and nonplastic; many very fine and fine, few medium and coarse roots; many very fine, few fine and medium tubular and interstitial pores; calcium carbonate is disseminated; very slightly effervescent; moderately alkaline; clear wavy boundary.
C1—2 to 5 inches; brown (7.5YR 5/4) loamy fine sand; brown (7.5YR 4/4) moist; single grained; loose, nonsticky and nonplastic; many very fine and fine, few medium and coarse roots; many very fine, few fine and medium tubular and interstitial pores; calcium carbonate is disseminated; slightly effervescent; moderately alkaline; clear wavy boundary.
C2—5 to 9 inches; light brown (7.5YR 6/4) fine sand; brown (7.5YR 4/4) moist; massive; slightly hard, very friable, nonsticky and nonplastic; few very fine, fine, medium, and coarse roots; few very fine and fine tubular pores; calcium carbonate is disseminated; slightly effervescent; moderately alkaline; gradual wavy boundary.
R—9 inches; unweathered sandstone.

Range in Characteristics

Depth to bedrock: 5 to 20 inches
Thickness of the ochric epipedon: 2 to 4 inches

A horizon:
Hue: 5YR or 7.5YR
Value: 5 or 6 dry, 4 or 5 moist
Chroma: 4 to 6
Effervescence: noneffervescent to very slightly effervescent
Reaction: slightly alkaline or moderately alkaline

C horizon:
Hue: 5YR or 7.5YR
Value: 5 or 6 dry, 3 or 4 moist
Chroma: 4 to 6
Texture: loamy fine sand, fine sand, or loamy sand
Effervescence: noneffervescent to very slightly effervescent
Reaction: slightly alkaline or moderately alkaline

Avalon Series

Map unit(s): 6, 7, 54
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: benches, cuestas, eroded areas fan terraces, hills
Position on landform: summits
Parent material: eolian deposits
Elevation: 5,500 to 6,500 feet (1,676 to 1,981 meters)
Slope: 1 to 12 percent
Climatic data:
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Frost-free period: 90 to 105 days

Taxonomic class: Fine-loamy, mixed, mesic Typic Calciorthids

Typical Pedon

Map unit in which located: Deaver-Avalon complex, 5 to 45 percent slopes
Location in the survey area: about 1,700 feet east and 1,700 feet north of the southwest corner of sec. 29, T. 4 N., R. 99 W.

A—0 to 3 inches; yellowish brown (10YR 5/4) loam, brown (10YR 4/3) moist; weak medium platy structure parting to moderate fine granular; soft, very friable, sticky and plastic; 10 percent gravel; slightly effervescent; moderately alkaline; abrupt smooth boundary.
Bw—3 to 12 inches; brown (7.5YR 5/4) clay loam, dark brown (7.5YR 4/4) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; hard, friable, sticky and plastic; 5 percent gravel; strongly effervescent; moderately alkaline; clear smooth boundary.
Bk1—12 to 22 inches; very pale brown (10YR 8/3) clay loam, very pale brown (10YR 7/4) moist; weak medium subangular blocky structure; hard, friable, sticky and plastic; calcium carbonate disseminated; 25 percent calcium carbonate equivalent; violently effervescent; moderately alkaline; gradual smooth boundary.
Bk2—22 to 42 inches; very pale brown (10YR 7/3) clay loam, very pale brown (10YR 7/4) moist; massive; hard, friable, sticky and plastic; calcium carbonate disseminated; 20 percent calcium carbonate equivalent; violently effervescent; moderately alkaline; gradual smooth boundary.
Bk3—42 to 55 inches; very pale brown (10YR 7/4) clay loam, brownish yellow (10YR 6/6) moist; massive; hard, friable, sticky and plastic; 5 percent gravel, 5 percent cobbles; calcium

carbonate disseminated; 17 percent calcium carbonate equivalent; violently effervescent; moderately alkaline; gradual smooth boundary.
Bk4—55 to 62 inches; very pale brown (10YR 7/4) clay loam, brownish yellow (10YR 6/6) moist; massive; hard, friable, sticky and plastic; calcium carbonate disseminated; violently effervescent; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 27 to 34 percent
Rock fragment content: 0 to 10 percent
Calcium carbonate equivalent: 15 to 40 percent
Depth to calcic horizon: 10 to 20 inches
Note: A 2Bk horizon with a texture of very fine sandy loam is present in some pedons. In the Avalon-Persayo, moist-Degater complex, 3 to 30 percent slopes, the Avalon soil has bedrock at a depth of 40 to 60 inches. In this map unit, a thin 2C horizon with a texture of channery loam or channery clay loam occurs in many pedons.

A horizon:
Hue: 10YR or 7.5YR
Reaction: mildly alkaline to moderately alkaline

Bw horizon:
Hue: 10YR or 7.5YR

Bk1 and Bk2 horizons:
Reaction: moderately alkaline to strongly alkaline

Bk3 and Bk4 horizons:
Texture: clay loam or gravelly clay loam
Rock fragment content: 5 to 25 percent gravel
Reaction: moderately alkaline or strongly alkaline

Bankard Family

Map unit(s): 227
Depth class: very deep
Drainage class: excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Landform: upper flood plains
Parent material: various source alluvium
Elevation: 5,000 to 6,000 feet (1,524 to 1,829 meters)
Slope: 0 to 5 percent
Climatic data:
Mean annual precipitation: 10 to 14 inches (254 to 356 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Frost-free period: 90 to 105 days
Taxonomic class: Sandy, mixed, mesic Ustic Torrifluvents

Typical Pedon

Map unit in which located: Tsetaa Family-Bankard Family-Fluvaquents complex, 0 to 45 percent slopes, very stony, from the Dinosaur National Monument Soil Survey
Location in the Dinosaur National Monument survey area: about 5,750 feet west and 200 feet south of the northeast corner, section 13, T. 8 N., R. 103 W., NMPM (site located in a non-sectioned area) latitude 40 degrees, 38 minutes, 51 seconds N. and longitude 108 degrees, 55 minutes, 53 seconds W.

A—0 to 2 inches; brown (10YR 5/3) sand, brown (10YR 4/3) moist; single grained; loose, nonsticky and nonplastic; common very fine and fine roots; few fine interstitial pores; calcium carbonate is disseminated; slightly effervescent; slightly alkaline; clear smooth boundary.
C1—2 to 23 inches; brown (10YR 5/3) sand, brown (10YR 4/3) moist; single grained; loose, nonsticky and nonplastic; few fine roots; few fine interstitial pores; calcium carbonate is disseminated; slightly effervescent; slightly alkaline; clear wavy boundary.
C2—23 to 28 inches; brown (7.5YR 5/4) loamy sand, brown (7.5YR 4/3) moist; single grained; loose, nonsticky and nonplastic; very few fine roots; few fine interstitial pores; calcium carbonate is disseminated; strongly effervescent; moderately alkaline; clear wavy boundary.
C3—28 to 34 inches; brown (10YR 5/3) sand, brown (10YR 4/3) moist; single grained; loose, nonsticky and nonplastic; very few fine roots; few fine interstitial pores; calcium carbonate is disseminated; strongly effervescent; moderately alkaline; clear wavy boundary.
C4—34 to 60 inches; yellowish brown (10YR 5/4) sand, dark yellowish brown (10YR 4/4) moist; single grained; loose, nonsticky and nonplastic; very few fine roots; few fine interstitial pores; calcium carbonate is disseminated; strongly effervescent; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 0 to 15 percent

A horizon:
Hue: 7.5YR or 10YR

Value: 4 to 6 dry, 3 to 5 moist
Chroma: 2 to 6
Texture: sand, fine sand, or loamy fine sand
Reaction: neutral to moderately alkaline

C horizon:
Hue: 7.5YR or 10YR
Value: 4 to 6 dry, 3 to 5 moist
Chroma: 2 to 6
Texture: sand, fine sand, loamy sand, or loamy fine sand
Reaction: slightly alkaline or moderately alkaline

Barkelew Series

Map unit(s): 224
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: steeper convex areas on mountainsides
Parent material: colluvium derived from limestone and sandstone
Elevation: 7,000 to 8,000 feet (2,134 to 2,438 meters)
Slope: 25 to 65 percent
Climatic data:
Mean annual precipitation: 15 to 16 inches (381 to 406 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Loamy-skeletal, mixed Borollic Calciorthids

Typical Pedon

Map unit in which located: Zillion-Barkelew, moist-Grapit complex, 25 to 65 percent slopes, extremely stony
Location in the survey area: about 1,700 feet north and 500 feet east of the southwest corner of sec. 3, T. 7 N., R. 102 W.

A—0 to 2 inches; brown (10YR 4/3) very gravelly loam, dark grayish brown (10YR 4/2) moist; moderate fine granular structure; soft, very friable, slightly sticky and slightly plastic; 35 percent gravel, 15 percent cobbles, 3 percent stones; strongly effervescent; moderately alkaline; abrupt smooth boundary.
AB—2 to 7 inches; brown (7.5YR 5/4) cobbly loam, brown (7.5YR 4/4) moist; moderate fine granular structure; soft, very friable, slightly sticky and plastic; 15 percent gravel, 10 percent cobbles, 3 percent stones; violently effervescent; moderately alkaline; clear wavy boundary.
Bw—7 to 16 inches; light brown (7.5YR 6/4) very cobbly clay loam, brown (7.5YR 5/4) moist; moderate medium subangular blocky structure; hard, friable, sticky and plastic; 25 percent gravel, 20 percent cobbles; violently effervescent; moderately alkaline; clear wavy boundary.
Bk1—16 to 23 inches; pinkish white (7.5YR 8/2) very cobbly clay loam, pink (7.5YR 7/4) moist; moderate medium subangular blocky structure parting to moderate fine subangular; hard, firm, sticky and plastic; 20 percent gravel, 25 percent cobbles; calcium carbonate disseminated; 30 percent calcium carbonate equivalent; violently effervescent; strongly alkaline; clear wavy boundary.
Bk2—23 to 34 inches; pink (7.5YR 7/4) very cobbly clay loam, light brown (7.5YR 6/4) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; hard, firm, sticky and plastic; 25 percent gravel, 20 percent cobbles; calcium carbonate disseminated; 25 percent calcium carbonate equivalent; violently effervescent; strongly alkaline; gradual wavy boundary.
Bk3—34 to 60 inches; pink (7.5YR 7/4) very cobbly sandy clay loam, light brown (7.5YR 6/4) moist; massive; hard, firm, sticky and plastic; 25 percent gravel, 25 percent cobbles; calcium carbonate disseminated; 20 percent calcium carbonate equivalent; violently effervescent; strongly alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 27 to 35 percent
Rock fragment content: 35 to 50 percent
Calcium carbonate equivalent: 20 to 40 percent

Bw horizon:
Hue: 7.5YR or 10YR

Bk horizons:
Hue: 7.5YR or 10YR
Texture: very cobbly clay loam or very cobbly sandy clay loam
Reaction: moderately alkaline or strongly alkaline

Baroid Series

Map unit(s): 9
Depth class: very deep

Drainage class: somewhat excessively drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: flood plains
Parent material: alluvium derived from mixed sources
Elevation: 5,300 to 6,000 feet (1,615 to 1,829 meters)
Slope: 0 to 3 percent
Climatic data:
Mean annual precipitation: 7 to 10 inches (178 to 254 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Frost-free period: 90 to 105 days

Taxonomic class: Sandy, mixed, mesic Typic Torrifluvents

Typical Pedon

Map unit in which located: Baroid-Eghelm complex, 0 to 3 percent slopes
Location in the survey area: about 1,900 feet south and 100 feet west of the northeast corner of sec. 25, T. 10 N., R. 103 W.

A—0 to 3 inches; brown (10YR 5/3) loamy fine sand, dark brown (10YR 4/3) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; strongly effervescent; moderately alkaline; abrupt smooth boundary.
C1—3 to 47 inches; stratified very pale brown (10YR 7/3) and light yellowish brown (10YR 6/4) fine sand, loamy fine sand, and fine sandy loam, pale brown (10YR 6/3) and yellowish brown (10YR 5/4) moist; single grained and massive; loose and soft, loose and very friable, nonsticky and slightly sticky, nonplastic and slightly plastic; strongly effervescent; strongly alkaline; abrupt smooth boundary.
C2—47 to 60 inches; brown (10YR 5/3) loam, dark brown (10YR 4/3) moist; massive; slightly hard, very friable, sticky and slightly plastic; strongly effervescent; strongly alkaline.

Range in Characteristics

Depth to a seasonal high water table: 5 to 7 feet
Reaction: moderately alkaline or strongly alkaline

C horizons:
Texture: stratified loamy fine sand, fine sand, fine sandy loam, and loam

Baston Series

Map unit(s): 175, 196
Depth class: moderately deep
Drainage class: well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Landform: hills, convex slopes on plateaus
Position on landform: footslopes
Parent material: residuum derived from shale
Elevation: 6,000 to 7,300 feet (1,829 to 2,225 meters)
Slope: 1 to 12 percent
Climatic data:
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine, montmorillonitic, frigid Typic Natrargids

Typical Pedon

Map unit in which located: Torriorthents-Baston complex, 3 to 12 percent slopes

Location in the survey area:
about 2,310 feet north and 330 feet east of the southwest corner of sec. 21, T. 9 N., R. 98 W.

E—0 to 1 inch; light gray (10YR 7/2) sandy loam, grayish brown (10YR 5/2) moist; moderate medium platy structure; slightly hard, very friable, slightly sticky and slightly plastic; violently effervescent; strongly alkaline; abrupt smooth boundary.
Btn—1 inch to 12 inches; light brownish gray (10YR 6/2) clay loam, light olive brown (2.5Y 5/4) moist; moderate medium prismatic structure; extremely hard, friable, sticky and plastic; few distinct clay films on faces of peds; strongly effervescent; very strongly alkaline; clear wavy boundary.
Bny—12 to 19 inches; light brownish gray (2.5Y 6/2) silty clay, grayish brown (2.5Y 5/2) moist; weak medium platy structure; very hard, friable, sticky and plastic; common fine clusters of gypsum crystals; slightly effervescent; strongly alkaline; clear smooth boundary.
C—19 to 28 inches; grayish brown (2.5Y 5/2) silty clay, very dark grayish brown (2.5Y 3/2) moist; massive; very hard, friable, sticky and plastic; slightly effervescent; strongly alkaline; abrupt smooth boundary.
Cr—28+ inches; weakly consolidated shale bedrock.

Range in Characteristics

Depth to paralithic contact: 20 to 40 inches

E horizon:
Hue: 2.5Y through 10YR

B horizon:
Hue: 2.5Y through 7.5YR
Texture: clay, silty clay loam, or silty clay
Clay content: 35 to 50 percent
Reaction: strongly alkaline or very strongly alkaline

C horizon:
Hue: 2.5Y through 7.5YR
Texture: sandy clay loam, clay loam, silty clay loam, or silty clay
Reaction: strongly alkaline or very strongly alkaline

Battlement Series

Map unit(s): 10, 11
Local phase(s): saline
Depth class: very deep
Drainage class: well drained, moderately well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: flood plains, stream terraces
Parent material: alluvium from mixed sources
Elevation: 6,000 to 7,200 feet (1,829 to 2,194 meters)
Slope: 0 to 3 percent
Climatic data:
Mean annual precipitation: 11 to 15 inches (279 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine-loamy, mixed (calcareous), frigid Ustic Torrifluvents

Typical Pedon

Map unit in which located: Battlement fine sandy loam, 0 to 3 percent slopes
Location in the survey area: about 1,600 feet south and 2,600 feet west of the northeast corner of sec. 30, T. 5 N., R. 92 W.

A—0 to 3 inches; dark grayish brown (10YR 4/2) fine sandy loam, very dark grayish brown (10YR 3/2) moist; moderate medium granular structure; slightly hard, very friable, slightly sticky and slightly plastic; strongly effervescent; mildly alkaline; clear wavy boundary.
C1—3 to 18 inches; light brownish gray (10YR 6/2) fine sandy loam, dark brown (10YR 4/3) moist; 40 percent weak medium subangular blocky structure and 60 percent moderate thin platy rock structure; slightly hard, very friable, slightly sticky and slightly plastic; strongly effervescent; moderately alkaline; clear wavy boundary.
C2—18 to 29 inches; pale brown (10YR 6/3) loam, dark grayish brown (10YR 4/2) moist; 40 percent weak medium subangular blocky structure and 60 percent moderate thin platy rock structure; hard, friable, slightly sticky and slightly plastic; strongly effervescent; moderately alkaline; gradual wavy boundary.
C3—29 to 38 inches; light brownish gray (10YR 6/2) silt loam, dark grayish brown (10YR 4/2) moist; 20 percent weak medium subangular blocky structure and 80 percent moderate thin platy rock structure; hard, friable, sticky and plastic; strongly effervescent; moderately alkaline; clear smooth boundary.
C4—38 to 53 inches; grayish brown (10YR 5/2) silty clay loam, very dark grayish brown (10YR 3/2) moist; moderate medium angular blocky structure; very hard, firm, sticky and plastic; strongly effervescent; moderately alkaline; clear smooth boundary.
C5—53 to 60 inches; light brownish gray (10YR 6/2) silt loam, dark grayish brown (10YR 4/2) moist; moderate medium platy rock structure; very hard, friable, sticky and plastic; strongly effervescent; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 18 to 35 percent
Hue: 10YR or 2.5Y
Note: Some areas have a seasonal high water table at a depth of 40 to 60 inches from April through June.

C horizons:
Texture: stratified sandy loam, loam, silt loam, clay loam, or silty clay loam
Reaction: moderately alkaline or strongly alkaline

Beamton Series

Map unit(s): 18
Depth class: moderately deep
Drainage class: well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Landform: hills
Position on landform: footslopes
Parent material: residuum and alluvium derived from shale
Elevation: 6,000 to 7,000 feet (1,829 to 2,134 meters)
Slope: 2 to 12 percent

Climatic data:
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine, montmorillonitic (calcareous), frigid Typic Torriorthents

Typical Pedon

Map unit in which located: Boltus-Beamton complex, 2 to 12 percent slopes
Location in the survey area: about 2,600 feet south and 1,000 feet east of the northwest corner of sec. 16, T. 11 N., R. 99 W.

A—0 to 2 inches; light yellowish brown (2.5Y 6/4) silty clay loam, light olive brown (2.5Y 5/4) moist; weak coarse granular structure parting to moderate very fine granular; slightly hard, very friable, very sticky and very plastic; strongly effervescent; moderately alkaline; clear smooth boundary.
AC—2 to 10 inches; light yellowish brown (2.5Y 6/4) silty clay loam, light olive brown (2.5Y 5/4) moist; weak fine subangular blocky structure; hard, friable, very sticky and very plastic; strongly effervescent; moderately alkaline; clear wavy boundary.
C—10 to 26 inches; light yellowish brown (2.5Y 6/4) silty clay loam, light olive brown (2.5Y 5/4) moist; weak medium subangular blocky structure; very hard, friable, very sticky and very plastic; strongly effervescent; strongly alkaline; abrupt smooth boundary.
Cy—26 to 33 inches; pale olive (5Y 6/3) silty clay loam, olive (5Y 5/3) moist; massive; very hard, firm, very sticky and very plastic; 30 percent soft shale fragments; few fine clusters of gypsum crystals; strongly effervescent, moderately alkaline; abrupt smooth boundary.
Cr—33 inches; light greenish gray soft shale bedrock.

Range in Characteristics

Depth to paralithic contact: 20 to 40 inches

A horizon:
Hue: 10YR or 2.5Y

AC horizon:
Hue: 10YR or 2.5Y
Texture: silty clay loam, silty clay, clay loam, or clay

C horizons:
Hue: 10YR to 5Y
Texture: silty clay loam, silty clay, clay loam, or clay
Reaction: moderately alkaline or strongly alkaline

Begay Series

Map unit(s): 267
Depth class: very deep
Drainage class: well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: fan remnants
Parent material: eolian deposits over alluvium derived from sandstone
Elevation: 5,300 to 6,600 feet (1,615 to 2,012 meters)
Slope: 2 to 15 percent
Climatic data:
Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Frost-free period: 110 to 140 days

Taxonomic class: Coarse-loamy, mixed, superactive, mesic Ustic Haplocambids

Typical Pedon

Map unit in which located: Solirec-Abracon-Begay complex, 2 to 15 percent slopes, from the Uintah Area, Utah Soil Survey
Location in survey area: about 12 miles north of Bonanza, Utah; about 600 feet north and 2,100 feet east of the southwest corner of sec. 36, T. 7 S., R. 25 E., SLBM; Dinosaur, Utah-Colo. USGS quadrangle; latitude 40 degrees, 09 minutes, 37 seconds north and longitude 109 degrees, 03 minutes, 02 seconds west; NAD 27.

A—0 to 4 inches; yellowish brown (10YR 5/4) sandy loam, brown (10YR 4/3) moist; weak very fine and fine granular structure; soft, very friable, nonsticky and nonplastic; common very fine and fine roots; common fine and very fine tubular pores; moderately alkaline (pH 8.0); abrupt smooth boundary.
Bw—4 to 12 inches; brown (7.5YR 5/4) sandy loam, brown (7.5YR 4/4) moist; moderate fine and medium subangular blocky structure; slightly hard, very friable, slightly sticky and nonplastic; common very fine and fine, few coarse roots; common very fine and fine tubular pores; very slightly effervescent; 2 percent calcium carbonate equivalent; calcium carbonate is disseminated; moderately alkaline (pH 8.2); abrupt smooth boundary.

Bk1—12 to 24 inches; light brown (7.5YR 6/4) sandy loam, brown (7.5YR 4/4) moist; weak fine and medium subangular blocky structure; slightly hard, very friable, slightly sticky and nonplastic; few very fine and fine, common medium and coarse roots; common very fine and fine interstitial pores; slightly effervescent; 3 percent calcium carbonate equivalent; calcium carbonate is disseminated and segregated as few fine masses; moderately alkaline (pH 8.4); clear smooth boundary.

Bk2—24 to 37 inches; pink (7.5YR 7/4) sandy loam, brown (7.5YR 5/4) moist; weak fine and medium subangular blocky structure; slightly hard, very friable, slightly sticky and nonplastic; few very fine, fine and medium roots; common very fine and fine interstitial pores; slightly effervescent; 4 percent calcium carbonate equivalent; calcium carbonate is disseminated and segregated as few fine masses; moderately alkaline (pH 8.4); clear smooth boundary.

C—37 to 60 inches; pink (7.5YR 7/4) sandy loam, brown (7.5YR 5/4) moist; weak fine and medium subangular blocky structure; slightly hard, very friable, slightly sticky and nonplastic; few fine and medium roots; few very fine and fine interstitial pores; slightly effervescent; 4 percent calcium carbonate equivalent; calcium carbonate is disseminated; strongly alkaline (pH 8.6).

Range in Characteristics

Particle-size control section (weighted average):
*Clay content:*10 to 15 percent
Average annual soil temperature: 47 to 52 degrees F.
Depth to secondary carbonates: 12 to 22 inches
Moisture control section: is affected by precipitation that falls evenly throughout the year with a slight increase in the late summer and fall
Moisture regime: aridic bordering on ustic

A horizon:
Hue: 7.5YR or 10YR
Value: 5 or 6 dry, 4 moist
Chroma: 3 or 4 dry or moist
Texture: sandy loam
Reaction: moderately alkaline

Bw horizon:
Hue: 5YR or 7.5YR
Value: 5 or 6 dry, 4 moist
Chroma: 4 or 5 dry or moist
Texture: sandy loam
Reaction: moderately alkaline

Bk horizon:
Hue: 7.5YR
Value: 6 or 7 dry, 4 or 5 moist
Chroma: 4 or 5 dry or moist
Texture: sandy loam
Calcium carbonate equivalent: 1 to 5 percent
Reaction: moderately alkaline

C horizon:
Hue: 7.5YR
Value: 6 or 7 dry, 4 or 5 moist
Chroma: 4 or 5 dry or moist
Texture: sandy loam
Reaction: moderately alkaline or strongly alkaline

Berlake Series

Map unit(s): 12, 13, 14, 15, 120
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: alluvial fans, drainageways, hills, hillslopes, plateaus
Position on landform: toeslopes
Parent material: alluvium and residuum derived from sandstone, colluvium and residuum derived from sandstone
Elevation: 6,200 to 8,000 feet (1,890 to 2,438 meters)
Slope: 1 to 25 percent
Climatic data:
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine-loamy, mixed Aridic Argiborolls

Typical Pedon

Map unit in which located: Berlake-Taffom-Gretdivid complex, 10 to 20 percent slopes
Location in the survey area: 800 feet west and 1,700 feet north of the southeast corner of sec. 26, T. 9 N., R. 92 W.

A1—0 to 3 inches; very dark grayish brown (10YR 3/2) coarse sandy loam, very dark brown (10YR 2/2) moist; weak fine granular structure; soft, very friable, slightly sticky and nonplastic; 10 percent gravel; neutral; abrupt smooth boundary.

A2—3 to 14 inches; dark grayish brown (10YR 4/2) coarse sandy loam, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure; soft, very friable, slightly sticky and nonplastic; 10 percent gravel; neutral; clear smooth boundary.

BA—14 to 18 inches; yellowish brown (10YR 5/4)

sandy clay loam, brown (10YR 4/3) moist; weak coarse subangular blocky structure parting to weak medium subangular blocky; hard, friable, slightly sticky and slightly plastic; 10 percent gravel; neutral; clear smooth boundary.

Bt1—18 to 27 inches; yellowish brown (10YR 5/4) sandy clay loam, dark yellowish brown (10YR 4/4) moist; weak coarse subangular blocky structure parting to moderate medium subangular blocky; hard, friable, sticky and slightly plastic; few faint clay films on faces of peds; 10 percent gravel; neutral; gradual smooth boundary.

Bt2—27 to 39 inches; light yellowish brown (10YR 6/4) sandy clay loam, yellowish brown (10YR 5/4) moist; moderate coarse subangular blocky structure parting to moderate medium subangular blocky; hard, friable, sticky and plastic; few faint clay films on faces of peds; 10 percent gravel; neutral; gradual smooth boundary.

Bt3—39 to 49 inches; light yellowish brown (10YR 6/4) sandy clay loam, yellowish brown (10YR 5/4) moist; weak coarse subangular blocky structure; hard, friable, slightly sticky and slightly plastic; few faint clay films on faces of peds; 10 percent gravel; neutral; gradual smooth boundary.

BC—49 to 57 inches; very pale brown (10YR 7/4) sandy clay loam, light yellowish brown (10YR 6/4) moist; weak coarse subangular blocky structure; hard, friable, slightly sticky and slightly plastic; 10 percent gravel; neutral; gradual smooth boundary.

C—57 to 60 inches; very pale brown (10YR 7/4) sandy loam, light yellowish brown (10YR 6/4) moist; massive; hard, friable, slightly sticky and slightly plastic; 10 percent gravel, neutral.

Range in Characteristics

Particle-size control section (weighted average):
Content of rock fragments: 0 to 15 percent gravel
Hue: 10YR through 5YR
Thickness of the mollic epipedon: 10 to 14 inches

Bt horizon:
Reaction: neutral or mildly alkaline

Bk horizon:
Texture: sandy loam or sandy clay loam
Note: Some pedons have a strongly effervescent and moderately alkaline Bk horizon below a depth of 40 inches.

C horizon:
Texture: sandy loam, loamy sand, or loamy coarse sand
Reaction: neutral or mildly alkaline

Bigtom Series

Map unit(s): 252
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: mountain slopes
Parent material: slope alluvium derived from sandstone and quartzite
Elevation: 7,800 to 8,600 feet (2,377 to 2,621 meters)
Slope: 15 to 25 percent
Climatic data:
Mean annual precipitation: 16 to 22 inches (406 to 559 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Frost-free period: 70 to 90 days

Taxonomic class: Loamy-skeletal, siliceous, superactive, frigid Pachic Argiustolls

Typical Pedon

Map unit in which located: Hoymount-Bigtom association, 25 to 50 percent slopes, from the Uintah Area, Utah Soil Survey
Location in survey area: about 2 1/2 miles east of Crouse Reservoir; about 2,200 feet west and 2,500 feet south of the northeast corner of sec. 20, T. 1 S., R. 25 E., SLBM; Crouse Reservoir, Utah USGS quadrangle; latitude 40 degrees, 43 minutes, 14 seconds north and longitude 109 degrees, 07 minutes, 49 seconds west; NAD 27.

The soil surface is covered by 5 percent boulders, 15 percent stones, 15 percent cobbles, and 5 percent gravel.

Oi—0 to 1 inch; slightly decomposed leaves, twigs, grass, and stems; abrupt smooth boundary. (The horizon ranges from 0 to 3 inches thick.)

A1—1 inch to 7 inches; very dark gray (5YR 3/1) extremely bouldery loam, black (5YR 2.5/1) moist; moderate very fine granular structure; soft, very friable, nonsticky and slightly plastic; many very fine, common medium and fine, and few coarse roots; common fine and very fine and few medium tubular pores; 5 percent boulders, 15 percent stones, 20 percent cobbles, and 10 percent gravel; slightly alkaline (pH 7.5); clear smooth boundary.

A2—7 to 12 inches; dark reddish brown (5YR 3/2) extremely stony loam, black (5YR 2.5/1) moist; weak coarse and medium subangular blocky structure parting to moderate fine and very fine

subangular blocky; soft, friable, slightly sticky and slightly plastic; many medium, fine, and very fine and common coarse roots; many very fine, common fine, and few medium tubular pores; 20 percent stones, 30 percent cobbles, and 20 percent gravel; neutral (pH 7.2); gradual smooth boundary. (The combined thickness of the A horizons is 8 to 17 inches.)

Bt1—12 to 23 inches; dark reddish brown (5YR 3/3) extremely cobbly clay loam, dark reddish brown (5YR 3/2) moist; moderate very fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many medium, fine and very fine, and common coarse roots; common fine and very fine and few medium tubular pores; few faint clay films on faces of peds and rock fragments; 20 percent stones, 45 percent cobbles, and 15 percent gravel; neutral (pH 7.2); gradual wavy boundary.

Bt2—23 to 31 inches; reddish brown (5YR 4/4) extremely cobbly clay loam, dark reddish brown (5YR 3/3) moist; moderate fine and very fine subangular blocky structure; slightly hard, firm, moderately sticky and moderately plastic; common coarse, medium, fine and very fine roots; common fine and very fine tubular pores; common distinct clay films on faces of peds and rock fragments; 20 percent stones, 40 percent cobbles, and 20 percent gravel; slightly alkaline (pH 7.4); clear wavy boundary.

Bt3—31 to 41 inches; reddish brown (5YR 4/4) extremely cobbly clay loam, dark reddish brown (2.5YR 3/4) moist; moderate coarse subangular blocky structure parting to moderate fine and very fine subangular blocky; hard, firm, moderately sticky and moderately plastic; common coarse, medium, fine, and very fine roots; common fine and very fine tubular pores; common distinct clay films on faces of peds and rock fragments; 20 percent stones, 35 percent cobbles, and 25 percent gravel; slightly alkaline (pH 7.4); gradual wavy boundary.

Bt4—41 to 61 inches; reddish brown (5YR 4/4) extremely cobbly sandy clay loam, dark red (2.5YR 3/6) moist; weak medium and fine subangular blocky structure; hard, firm, moderately sticky and moderately plastic; few coarse and common medium, fine, and very fine roots; common fine and very fine tubular pores; common distinct clay films on faces of peds and rock fragments; 10 percent stones, 30 percent cobbles, and 40 percent gravel; slightly alkaline (pH 7.4).

Range in Characteristics

Particle-size control section (weighted average):
- *Clay content:* 28 to 35 percent
- *Rock fragment content:* 45 to 90 percent of sandstone and quartzite origin

Mean annual soil temperature: 42 to 45 degrees F.
Moisture control section: is affected by precipitation that falls evenly throughout the year with a slight increase in late summer and early fall
Moisture regime: ustic
Thickness of the mollic epipedon: 16 to 30 inches

A horizon:
- *Hue:* 5YR
- *Value:* 3 or 4 dry, 2 or 3 moist
- *Chroma:* 1 to 4 dry, 1 or 3 moist
- *Texture:* extremely bouldery loam
- *Rock fragment content:* 60 to 80 percent boulders, stones, cobbles, and gravel
- *Reaction:* neutral or slightly alkaline

Bt horizon:
- *Hue:* 10R to 5YR
- *Value:* 3 to 6 dry, 3 or 4 moist
- *Chroma:* 2 to 6 dry or moist
- *Texture:* extremely cobbly clay loam, extremely cobbly sandy clay loam, very stony clay loam, or very stony clay loam
- *Rock fragment content:* 45 to 90 percent
- *Reaction:* neutral or slightly alkaline

Bilhil Series

Map unit(s): 16
Depth class: very deep
Drainage class: moderately well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Landform: alluvial fans, stream terraces
Parent material: alluvium derived from mixed sources
Elevation: 6,000 to 6,800 feet (1,829 to 2,073 meters)
Slope: 0 to 3 percent
Climatic data:
- *Mean annual precipitation:* 12 to 15 inches (305 to 381 millimeters)
- *Mean annual air temperature:* 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
- *Frost-free period:* 75 to 95 days

Taxonomic class: Fine, montmorillonitic Aridic Haploborolls

Typical Pedon

Map unit in which located: Bilhil clay loam, 0 to 3 percent slopes
Location in the survey area: about 1,200 feet east and 200 feet south of the northwest corner of sec. 1, T. 6 N., R. 91 W.

A—0 to 3 inches; grayish brown (10YR 5/2) clay loam, very dark grayish brown (10YR 3/2) moist; moderate fine granular structure; slightly hard, friable, very sticky and very plastic; neutral; clear smooth boundary.
AB—3 to 12 inches; brown (10YR 5/3) clay loam, dark brown (10YR 3/3) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; very hard, friable, very sticky and very plastic; neutral; clear smooth boundary.
Bw—12 to 23 inches; yellowish brown (10YR 5/4) clay, dark yellowish brown (10YR 4/4) moist; moderate coarse angular blocky structure; very hard, firm, very sticky and very plastic; mildly alkaline; abrupt wavy boundary.
Bk1—23 to 36 inches; light yellowish brown (10YR 6/4) clay, yellowish brown (10YR 5/4) moist; moderate coarse prismatic structure parting to moderate coarse angular blocky; hard, firm, very sticky and very plastic; common fine threads of calcium carbonate; strongly effervescent; moderately alkaline; clear wavy boundary.
Bk2—36 to 46 inches; light yellowish brown (10YR 6/4) clay, yellowish brown (10YR 5/4) moist; moderate coarse angular blocky structure; hard, firm, very sticky and very plastic; few fine threads of calcium carbonate; slightly effervescent; moderately alkaline; gradual wavy boundary.
Bk3—46 to 54 inches; light yellowish brown (10YR 6/4) clay, yellowish brown (10YR 5/4) moist; few fine faint yellowish brown (10YR 5/8) mottles; moderate coarse angular blocky structure; hard, firm, very sticky and very plastic; few fine threads of calcium carbonate; slightly effervescent; moderately alkaline; clear wavy boundary.
Bk4—54 to 60 inches; pale brown (10YR 6/3) clay, brown (10YR 5/3) moist; common medium distinct strong brown (7.5YR 5/8) and gray (2.5Y 6/1) mottles; moderate coarse angular blocky structure; hard, firm, very sticky and very plastic; few fine threads of calcium carbonate; slightly effervescent; moderately alkaline.

Range in Characteristics

Depth to a seasonal high water table: 3 to 5 feet from April through June
Depth to secondary calcium carbonate: 15 to 25 inches
Thickness of the mollic epipedon: 7 to 13 inches

A horizon:
Reaction: neutral or mildly alkaline

Bw horizon:
Hue: 10YR or 2.5Y
Texture: clay loam, clay, or silty clay loam
Reaction: mildly alkaline or moderately alkaline

Bk horizons:
Hue: 10YR or 2.5Y
Texture: clay loam, silty clay loam, or clay

Binco Series

Map unit(s): 17, 167
Depth class: very deep
Drainage class: well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Landform: hills, hillslopes
Position on landform: shoulders, backslopes
Parent material: residuum and colluvium derived from shale, residuum derived from shale
Elevation: 7,200 to 8,200 feet (2,195 to 2,499 meters)
Slope: 10 to 45 percent
Climatic data:
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Frost-free period: 50 to 75 days

Taxonomic class: Fine, montmorillonitic, frigid Udorthentic Chromusterts

Typical Pedon

Map unit in which located: Binco gravelly clay loam, 15 to 45 percent slopes, very stony
Location in the survey area: about 2,000 feet south and 2,500 feet west of the northeast corner of sec. 25, T. 11 N., R. 90 W.

A—0 to 2 inches; grayish brown (10YR 5/2) gravelly clay loam, dark brown (10YR 4/3) moist; moderate medium granular structure; soft, friable, sticky and plastic; 20 percent gravel, 10 percent cobbles; 1 percent stones; neutral; abrupt smooth boundary.

Bw1—2 to 9 inches; yellowish brown (10YR 5/4) clay loam, dark yellowish brown (10YR 4/4) moist; moderate fine and medium angular blocky structure; very hard, firm, very sticky and very plastic; mildly alkaline; abrupt smooth boundary.

Bw2—9 to 12 inches; light gray (10YR 7/2) clay, light brownish gray (10YR 6/2) moist; moderate medium and coarse angular blocky structure; very hard, very firm, very sticky and very plastic; slightly effervescent; moderately alkaline; abrupt irregular boundary.

Bk1—12 to 24 inches; light gray (10YR 7/2) clay, light brownish gray (10YR 6/2) moist; weak very coarse angular blocky structure; very hard, very firm, very sticky and very plastic; common slickensides; few fine concentrations of calcium carbonate; strongly effervescent; moderately alkaline; diffuse wavy boundary.

Bk2—24 to 57 inches; light gray (5Y 7/2), olive yellow (5Y 6/6), and reddish brown (2.5YR 5/4) clay, light olive gray (5Y 6/2), olive (5Y 5/6), and reddish brown (2.5YR 4/4) moist; massive; very hard, very firm, very sticky and very plastic; common slickensides; few fine concentrations of calcium carbonate; strongly effervescent; moderately alkaline; clear wavy boundary.

By—57 to 60 inches; light gray (5Y 7/2) and olive yellow (5Y 6/6) clay; light olive gray (5Y 6/2) and olive (5Y 5/6) moist; massive, very hard, very firm, very sticky and very plastic; 5 percent gypsum crystals; slightly effervescent; moderately alkaline.

Range in Characteristics

Note: The Binco soil in map unit #167, Routt-Cochetopa-Binco complex, is outside the range of the Binco series because it has an argillic horizon.

A horizon:

Rock fragment content: 10 to 25 percent gravel, 5 to 15 percent cobbles, and 0 to 5 percent stones

Depth to effervescence: 5 to 20 inches

Bw and Bk1 horizons:

Hue: 2.5Y or 10YR

Rock fragment content: 0 to 10 percent

Bk2, By, and C horizons:

Hue: 10R through 5Y, variegated; crushed peds have hues of 10YR or 7.5YR

Texture: clay or clay loam

Depth to effervescence: 20 to 30 inches

Boltus Series

Map unit(s): 18
Depth class: shallow
Drainage class: well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Landform: hills
Position on landform: backslopes, footslopes
Parent material: residuum derived from shale
Elevation: 6,000 to 7,000 feet (1,829 to 2,134 meters)
Slope: 2 to 12 percent
Climatic data:

Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)

Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)

Frost-free period: 75 to 95 days

Taxonomic class: Clayey, montmorillonitic (calcareous), frigid, shallow Typic Torriorthents

Typical Pedon

Map unit in which located: Boltus-Beamton complex, 2 to 12 percent slopes

Location in the survey area: about 1,400 feet north and 2,400 feet east of the southwest corner of sec. 16, T. 11 N., R. 99 W.

A—0 to 3 inches; light yellowish brown (2.5Y 6/4) silty clay loam, light olive brown (2.5Y 5/4) moist; moderate medium granular structure; slightly hard, very friable, sticky and slightly plastic; violently effervescent strongly alkaline; abrupt smooth boundary.

C1—3 to 9 inches; light yellowish brown (2.5Y 6/4) silty clay loam, light olive brown (2.5Y 5/4) moist; massive; slightly hard, friable, sticky and plastic; violently effervescent; strongly alkaline; gradual wavy boundary.

C2—9 to 13 inches; light yellowish brown (2.5Y 6/4) silty clay, light olive brown (2.5Y 5/4) moist; massive; slightly hard, friable, sticky and plastic; few fine crystals of calcium sulfate; strongly effervescent; moderately alkaline; clear wavy boundary.

C3—13 to 17 inches; light yellowish brown (2.5Y 6/4) silty clay loam, light olive brown (2.5Y 5/4) moist; massive; slightly hard, friable, very sticky and very plastic; 50 percent highly weathered silt shale fragments; common fine crystals of calcium sulfate; slightly effervescent; moderately alkaline; clear wavy boundary.

Cr—17 inches; weakly consolidated shale bedrock.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 10 to 35 percent soft shale fragments
Depth to paralithic contact: 10 to 20 inches
Hue: 10YR or 2.5Y

C horizon:
Texture: silty clay or silty clay loam
Reaction: moderately alkaline or strongly alkaline

Bondman Series

Map unit(s): 228
Depth class: very shallow to shallow
Drainage class: well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: mountains
Position on landform: summits, shoulders, backslopes
Parent material: residuum weathered from sandstone
Elevation: 5,500 to 6,200 feet (1,676 to 1,890 meters)
Slope: 5 to 40 percent
Climatic data:
Mean annual precipitation: 10 to 12 inches (254 to 305 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Frost-free period: 90 to 105 days

Taxonomic class: Loamy, mixed, superactive, mesic Lithic Ustic Haplargids

Typical Pedon

Map unit in which located: Bondman-Rock outcrop complex, 5 to 40 percent slopes, from the Dinosaur National Monument Soil Survey
Location in the Dinosaur National Monument survey area: about 3,200 feet east and 1,900 feet south of the northwest corner, section 29, T. 9 N., R. 102 W., NMPM latitude 40 degrees, 42 minutes, 45 seconds N. and longitude 108 degrees, 53 minutes, 2 seconds W.

The soil surface is covered with sandstone rock fragments, consisting of 5 percent gravel and 5 percent cobbles.

A—0 to 2 inches; reddish brown (2.5YR 4/3) sandy loam, dark reddish brown (2.5YR 3/3) moist; weak thin platy structure; slightly hard, friable, slightly sticky and slightly plastic; few fine and medium roots; many fine and medium vesicular pores; neutral; clear smooth boundary.
Bt—2 to 8 inches; reddish brown (2.5YR 4/4) sandy clay loam, dark reddish brown (2.5YR 3/4) moist; weak fine and medium subangular blocky structure; hard, friable, sticky and plastic; few fine and medium, common coarse and very coarse roots; few very fine tubular pores; few faint clay films on faces of peds; neutral; abrupt smooth boundary.
R—8 inches; hard sandstone.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 20 to 35 percent
Rock fragment content: 0 to 20 percent
Depth to bedrock: 7 to 20 inches

A horizon:
Hue: 2.5YR to 7.5YR
Value: 4 or 5 dry, 3 or 4 moist
Chroma: 3 to 5
Reaction: neutral or slightly alkaline

Bt horizon:
Hue: 2.5YR to 7.5YR
Value: 4 to 6 dry, 3 to 5 moist
Chroma: 2 or 3
Texture: loam or sandy clay loam
Reaction: neutral or slightly alkaline

Borollic Haplargids

Map unit(s): 19
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: breaks, hills
Position on landform: toeslopes
Parent material: alluvium derived from sedimentary rocks
Elevation: 6,000 to 6,800 feet (1,829 to 2,073 meters)
Slope: 3 to 20 percent
Climatic data:
Mean annual precipitation: 11 to 15 inches (279 to 381 millimeters)
Mean annual air temperature: 41 to 45 degrees F. (5.2 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Borollic Haplargids

Typical Pedon

Map unit in which located: Borollic Natrargids-Borollic Haplargids-Ustic Torrifluvents complex, 0 to 20 percent slopes

Location in the survey area: about 1,300 feet east and 600 feet south of the northwest corner of sec. 7, T. 7 N., R. 90 W.

A1—0 to 2 inches; light brownish gray (10YR 6/2) sandy loam, very dark grayish brown (10YR 3/2) moist; weak medium platy structure; soft, very friable, slightly sticky and nonplastic; neutral; abrupt smooth boundary.

A2—2 to 6 inches; grayish brown (10YR 5/2) sandy clay loam, very dark grayish brown (10YR 3/2) moist; weak coarse subangular blocky structure; slightly hard, friable, sticky and slightly plastic; neutral; clear wavy boundary.

Bt1—6 to 11 inches; brown (10YR 5/3) clay loam, brown (10YR 4/3) moist; moderate medium prismatic structure parting to moderate coarse subangular blocky; hard, firm, sticky and plastic; common faint clay films on faces of peds; neutral; clear wavy boundary.

Bt2—11 to 18 inches; light yellowish brown (10YR 6/4) clay loam, brown (10YR 5/3) moist; moderate medium prismatic structure parting to strong medium angular blocky; hard, firm, sticky and plastic; many distinct clay films on faces of peds and along interstitial pores; mildly alkaline; clear wavy boundary.

Bt3—18 to 30 inches; pale brown (10YR 6/3) sandy clay loam, brown (10YR 5/3) moist; moderate medium prismatic structure parting to weak very coarse angular blocky; hard, firm, sticky and slightly plastic; many distinct clay films on faces of peds and along interstitial pores; mildly alkaline; gradual wavy boundary.

Bt4—30 to 40 inches; pale brown (10YR 6/3) sandy loam, brown (10YR 5/3) moist; weak medium prismatic structure; slightly hard, friable, slightly sticky and nonplastic; many distinct clay films on faces of peds and along interstitial pores; mildly alkaline; gradual wavy boundary.

BC—40 to 48 inches; light gray (2.5Y 7/2) sandy loam, grayish brown (2.5Y 5/2) moist; weak medium prismatic structure; slightly hard, friable, slightly sticky and nonplastic; mildly alkaline; abrupt wavy boundary.

Bk—48 to 60 inches; light gray (5Y 7/2) sandy clay loam, olive (5Y 5/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; common concentrations of calcium carbonate; strongly effervescent, moderately alkaline.

Range in Characteristics

Depth to argillic horizon: 15 to 40 inches
Depth to secondary calcium carbonate: 15 to 50 inches

A horizon:
Texture: sandy loam, loam, or clay loam
Reaction: neutral or mildly alkaline

Bt horizons:
Hue: 10YR or 7.5YR
Texture: sandy clay loam, clay loam, or clay
Clay content: 20 to 45 percent
Reaction: neutral or mildly alkaline

Bk horizon:
Hue: 7.5YR through 5Y
Texture: sandy loam, sandy clay loam, or clay loam
Clay content: 10 to 35 percent

Borollic Natrargids

Map unit(s): 19
Depth class: very deep
Drainage class: well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Landform: hills, stream terraces
Position on landform: toeslopes
Parent material: alluvium derived from sedimentary rocks
Elevation: 6,000 to 6,800 feet (1,829 to 2,073 meters)
Slope: 0 to 6 percent
Climatic data:
Mean annual precipitation: 11 to 15 inches (279 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Borollic Natrargids

Typical Pedon

Map unit in which located: Borollic Natrargids-Borollic Haplargids-Ustic Torrifluvents complex, 0 to 20 percent slopes
Location in the survey area: about 1,600 feet west and 1,000 feet south of the northeast corner of sec. 32, T. 9 N., R. 90 W.

A—0 to 5 inches; light brownish gray (2.5Y 6/2) fine sandy loam, dark grayish brown (2.5Y 4/2) moist; moderate medium platy structure parting to weak fine granular; slightly hard, friable, slightly sticky and nonplastic; neutral; abrupt smooth boundary.

Btn—5 to 16 inches; light yellowish brown (10YR 6/4) silty clay loam, brownish yellow (10YR 6/6) moist; moderate medium prismatic structure parting to moderate fine and medium subangular blocky; hard, firm, sticky and plastic; few distinct clay

films on faces of peds, noneffervescent; moderately alkaline; clear smooth boundary.
Byz1—16 to 30 inches; brown (10YR 5/3) silty clay loam; dark grayish brown (10YR 4/2) moist; weak medium subangular blocky structure; very hard, very firm, sticky and plastic; common fine and medium soft masses of gypsum and other salts; noneffervescent; moderately alkaline; gradual smooth boundary.
Byz2—30 to 38 inches; pale brown (10YR 6/3) silty clay, brown (10YR 4/3) moist; moderate medium subangular blocky structure; very hard, very firm, sticky and plastic; medium soft masses of gypsum and other salts; noneffervescent; moderately alkaline; gradual smooth boundary.
Byz3—38 to 45 inches; very pale brown (10YR 7/3) silty clay loam, brown (10YR 5/3) moist; moderate medium prismatic structure; hard, firm, sticky and plastic; many fine and medium soft masses of gypsum and other salts; strongly effervescent; strongly alkaline; clear smooth boundary.
Byz4—45 to 60 inches; yellowish brown (10YR 5/4) sandy clay loam, dark yellowish brown (10YR 4/4) moist; massive; hard, firm, sticky and plastic; common fine and medium soft masses of gypsum and other salts; slightly effervescent; strongly alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 0 to 10 percent

A horizon:
Hue: 5Y to 10YR
Texture: very fine sandy loam, fine sandy loam, loam, or silt loam
Reaction: neutral to moderately alkaline

Btn horizon:
Hue: 2.5Y to 7.5YR
Texture: clay, clay loam, silty clay, or silty clay loam
Reaction: moderately alkaline or strongly alkaline

Byz1 and Byz2 horizons:
Hue: 2.5Y to 7.5YR
Texture: clay, clay loam, silty clay, or silty clay loam
Reaction: moderately alkaline or strongly alkaline

Byz3 horizon:
Hue: 2.5Y to 10YR
Texture: sand, sandy clay loam, silty clay loam, or clay
Reaction: moderately alkaline or strongly alkaline

Borolls

Map unit(s): 206
Depth class: moderately deep to very deep
Drainage class: well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: mountainsides
Position on landform: backslopes, footslopes
Parent material: residuum and colluvium derived from sedimentary rocks
Elevation: 7,000 to 8,500 feet (2,134 to 2,591 meters)
Slope: 25 to 75 percent
Climatic data:
Mean annual precipitation: 16 to 20 inches (406 to 508 millimeters)
Mean annual air temperature: 37 to 45 degrees F. (2.8 to 7.2 degrees C.)
Frost-free period: 50 to 85 days

Taxonomic class: Borolls

Typical Pedon

Map unit in which located: Ustorthents, frigid-Borolls complex, 25 to 75 percent slopes
Location in the survey area: in the NE 1/4, NW 1/4 of sec. 1, T. 4 N., R. 91 W.

A1—0 to 10 inches; very dark grayish brown (10YR 3/2) loam, very dark brown (10YR 2/2) moist; moderate fine granular structure; soft, very friable, slightly sticky and slightly plastic; neutral; clear smooth boundary.
A2—10 to 19 inches; dark grayish brown (10YR 4/2) loam, very dark grayish brown (10YR 3/2) moist; moderate medium subangular blocky structure parting to weak fine subangular blocky; soft, very friable, sticky and slightly plastic; neutral; clear smooth boundary.
Bw—19 to 30 inches; grayish brown (10YR 5/2) cobbly sandy clay loam, dark grayish brown (10YR 4/2) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; slightly hard, friable, sticky and slightly plastic; 10 percent gravel, 20 percent cobbles; neutral; abrupt wavy boundary.
R—30 inches; hard sandstone bedrock.

Range in Characteristics

Depth to lithic or paralithic contact: 20 to 80 inches
Hue: 2.5YR to 2.5Y
Thickness of the mollic epipedon: 10 to 30 inches
Note: The depth to horizons containing calcium carbonate commonly is 40 inches or more except in areas where basalt or limestone geologic

material are present, then calcium carbonate is present in some or all of the horizons above a depth of 40 inches. These soils are in the loamy-skeletal, coarse-loamy, fine-loamy, and fine particle-size classes. Some pedons contain argillic, cambic, or calcic horizons.

A horizon:
Hue: 10YR or 7.5YR
Texture: extremely stony sandy loam, loam, or channery loam

B horizon:
Hue: 10YR or 7.5YR
Texture: very stony sandy clay loam, cobbly sandy clay loam, or clay loam

Boxring Series

Map unit(s): 266
Depth class: shallow
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: mountain slopes
Parent material: slope alluvium derived from sandstone
Elevation: 6,000 to 7,000 feet (1,829 to 2,134 meters)
Slope: 10 to 25 percent
Climatic data:
Mean annual precipitation: 12 to 16 inches (305 to 406 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 90 to 110 days

Taxonomic class: Loamy-skeletal, siliceous, superactive, frigid Aridic Lithic Argiustolls

Typical Pedon

Map unit in which located: Rock outcrop-Boxring-Tridell complex, 10 to 50 percent slopes, from the Uintah Area, Utah Soil Survey
Location in the Uintah Area, Utah survey area: about 2 miles southeast of Kings Point; about 2,200 feet east and 1,000 feet south of the northwest corner of sec. 14, T. 1 N., R. 25 E., SLBM; Swallow Canyon, Utah-Colo. USGS quadrangle; latitude 40 degrees, 49 minutes, 36 seconds north and longitude 109 degrees, 03 minutes, 37 seconds west; NAD 27.

The soil surface is covered by 40 percent stones, 5 percent cobbles, and 5 percent gravel.

A—0 to 6 inches; reddish brown (5YR 4/3) extremely stony sandy loam, dark reddish brown (5YR 3/2) moist; weak medium subangular blocky structure parting to weak fine and very fine granular; soft, friable, slightly sticky and nonplastic; many very fine and fine roots; common very fine tubular pores; 5 percent stones and 10 percent cobbles; moderately alkaline (pH 8.2); clear wavy boundary. (The combined thickness of the A horizons is 2 to 9 inches.)

Bt1—6 to 12 inches; reddish brown (5YR 4/3) extremely cobbly sandy clay loam, dark reddish brown (5YR 3/3) moist; moderate medium and fine subangular blocky structure parting to moderate fine and very fine subangular blocky; very hard, firm, slightly sticky and slightly plastic; many very fine, fine, medium, and coarse roots; many very fine, common fine tubular pores; 10 percent stones, 45 percent cobbles, and 10 percent gravel; few faint clay films on ped faces and lining pores; moderately alkaline (pH 8.0); clear wavy boundary.

Bt2—12 to 14 inches; dark reddish brown (5YR 3/4) extremely cobbly sandy clay loam, dark reddish brown (5YR 3/3) moist; moderate medium and fine subangular blocky structure; very hard, firm, slightly sticky and slightly plastic; many very fine, fine, and medium, few coarse roots; common very fine and fine tubular pores; 15 percent stones, 45 percent cobbles, and 10 percent gravel; few faint clay films on ped faces and lining pores; moderately alkaline (pH 8.0); abrupt wavy boundary. (The combined thickness of the Bt horizons is 8 to 11 inches.)

R—14 inches; unweathered sandstone bedrock with fractures greater than 4 inches apart.

Range in Characteristics:

Particle-size control section (weighted average):
Clay content: 18 to 27 percent
Rock fragment content: 40 to 80 percent sandstone
Depth to lithic contact: 10 to 20 inches to sandstone bedrock
Mean annual soil temperature: 44 to 47 degrees F.
Moisture control section: is affected by precipitation that falls evenly throughout the year with a slight increase in late summer and fall
Moisture regime: ustic bordering on aridic
Thickness of the mollic epipedon: 7 to 16 inches

A horizon:
Hue: 5YR or 7.5YR
Value: 3 to 5 dry, 2 or 3 moist
Chroma: 1 to 3 dry or moist
Texture: extremely stony sandy loam
Reaction: moderately alkaline

Bt horizon:
Hue: 5YR or 7.5YR
Value: 3 to 5 dry, 3 or 4 moist
Chroma: 2 to 4 dry or moist
Texture: extremely cobbly sandy clay loam, very cobbly sandy loam, extremely cobbly sandy loam, or very cobbly sandy clay loam
Reaction: moderately alkaline

Brownsto Series

Map unit(s): 20
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: breaks, plateaus
Parent material: relict fluvial gravel deposits derived from mixed sources
Elevation: 6,400 to 7,400 feet (1,951 to 2,256 meters)
Slope: 3 to 25 percent
Climatic data:
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Loamy-skeletal, mixed Borollic Calciorthids

Typical Pedon

Map unit in which located: Brownsto-Castee complex, 3 to 25 percent slopes
Location in the survey area: about 400 feet north and 1,600 feet west of the southeast corner of sec. 21, T. 10 N., R. 97 W.

A—0 to 3 inches; brown (10YR 5/3) gravelly loam, dark yellowish brown (10YR 4/4) moist; weak thick platy structure parting to moderate medium granular; soft, very friable, slightly sticky and slightly plastic; 15 percent gravel; slightly effervescent; moderately alkaline; clear smooth boundary.
Bw—3 to 14 inches; brown (10YR 5/3) gravelly loam, dark yellowish brown (10YR 4/4) moist; weak medium subangular blocky structure; soft, friable, sticky and plastic; 15 percent gravel; strongly effervescent; moderately alkaline; clear wavy boundary.
Bk1—14 to 29 inches; white (10YR 8/2) very cobbly loam, very pale brown (10YR 7/4) moist; moderate medium subangular blocky structure; hard, firm, sticky and plastic; 20 percent gravel, 15 percent cobbles, 5 percent stones; calcium carbonate disseminated; 35 percent calcium carbonate equivalent; violently effervescent; strongly alkaline; gradual wavy boundary.
Bk2—29 to 60 inches; pale yellow (2.5Y 8/3) very cobbly sandy loam, light yellowish brown (10YR 6/4) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; 30 percent gravel, 20 percent cobbles, 5 percent stones; calcium carbonate disseminated; 8 percent calcium carbonate equivalent; violently effervescent; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 18 to 25 percent total clay with 12 to 18 percent noncarbonate clay
Rock fragment content: 35 to 60 percent
Calcium carbonate equivalent: 15 to 40 percent
Depth to effervescence: 0 to 5 inches
Depth to secondary calcium carbonate: 10 to 20 inches

A horizon:
Hue: 2.5Y to 10YR

Bw horizon:
Texture: sandy loam, loam, gravelly loam, or gravelly sandy loam

Bk horizons:
Hue: 2.5Y to 10YR
Texture: very cobbly or very gravelly modifiers of sandy loam, loam, or sandy clay loam

Bulkley Series

Map unit(s): 21, 22, 23, 24
Depth class: very deep
Drainage class: well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Landform: alluvial fans, hills, hillslopes
Position on landform: summits, backslopes, toeslopes
Parent material: alluvium and residuum derived from shale, alluvium derived from shale, colluvium derived from shale, residuum derived from shale
Elevation: 6,200 to 8,300 feet (1,890 to 2,530 meters)
Slope: 3 to 45 percent
Climatic data:
Mean annual precipitation: 13 to 17 inches (330 to 432 millimeters)
Mean annual air temperature: 40 to 45 degrees F. (4.4 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine, montmorillonitic, frigid Udorthentic Chromusterts

Typical Pedon

Map unit in which located: Bulkley silty clay, 12 to 25 percent slopes
Location in the survey area: about 2,600 feet south and 800 feet west of the northeast corner of sec. 15, T. 6 N., R. 90 W.

A—0 to 4 inches; light yellowish brown (2.5Y 6/4) silty clay, brown (10YR 4/3) moist; moderate medium subangular blocky structure; hard, firm, very sticky and very plastic; mildly alkaline; clear smooth boundary.
Bw—4 to 21 inches; brown (10YR 5/3) clay, yellowish brown (10YR 5/4) moist; strong coarse prismatic structure parting to moderate coarse subangular blocky; extremely hard, very firm, very sticky and very plastic; many slickensides; slightly effervescent; mildly alkaline; gradual wavy boundary.
Bk1—21 to 36 inches; brown (10YR 5/3) clay, yellowish brown (10YR 5/4) moist; moderate very coarse subangular blocky structure parting to moderate coarse subangular blocky; extremely hard, very firm, very sticky and very plastic; many slickensides; common coarse soft masses of calcium carbonate; strongly effervescent; moderately alkaline; clear wavy boundary.
Bk2—36 to 60 inches; brown (10YR 5/3) silty clay, light olive brown (2.5Y 5/4) moist; weak coarse subangular blocky structure parting to weak medium subangular blocky; very hard, very firm, very sticky and very plastic; common slickensides; common fine masses of calcium carbonate; strongly effervescent; moderately alkaline.

Range in Characteristics

Hue: 10YR or 2.5Y
Note: This soil commonly is effervescent at a depth of 0 to 15 inches; however, in the map unit #21 of Bulkley stony loam, 15 to 30 percent slopes, very stony, the depth to effervescent horizons ranges from 20 to 35 inches. When the soil dries, it develops cracks 1/2 to 3/4 inch wide to a depth of 20 inches or more.

A horizon:
Reaction: neutral through moderately alkaline

Bw horizon:
Reaction: neutral through moderately alkaline

Bk horizons:
Texture: silty clay or clay

Cameo Series

Map unit(s): 227, 229
Depth class: very deep
Drainage class: well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: upper flood plains
Parent material: various source alluvium
Elevation: 5,000 to 6,000 feet (1,524 to 1,829 meters)
Slope: 0 to 5 percent
Climatic data:
Mean annual precipitation: 10 to 14 inches (254 to 356 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Frost-free period: 90 to 105 days

Taxonomic class: Coarse-loamy, mixed, superactive, calcareous, mesic Ustic Torrifluvents

Typical Pedon

Map unit in which located: Bankard Family-Cameo complex, 0 to 5 percent slopes, from the Dinosaur National Monument Soil Survey
Location in the Dinosaur National Monument survey area: about 2,500 feet west and 700 feet south of the northeast corner, section 28, T. 6 N., R. 99 W., NMPM latitude 40 degrees, 26 minutes, 51 seconds N. and longitude 108 degrees, 31 minutes, 14 seconds W.

A—0 to 2 inches; yellowish brown (10YR 5/4) loamy fine sand, brown (10YR 4/3) moist; weak thick platy structure; slightly hard, friable, nonsticky and nonplastic; common fine roots; common fine vesicular and tubular pores; calcium carbonate is disseminated; strongly effervescent; strongly alkaline; clear smooth boundary.
AC—2 to 7 inches; light yellowish brown (10YR 6/4) fine sandy loam, dark yellowish brown (10YR 4/4) moist; weak very coarse subangular blocky structure; hard, friable, nonsticky and nonplastic; common fine roots; common fine vesicular and tubular pores; calcium carbonate is disseminated; strongly effervescent; moderately alkaline; clear smooth boundary.
C1—7 to 22 inches; light yellowish brown (10YR 6/4) fine sandy loam, dark yellowish brown (10YR 4/4) moist; weak medium and coarse blocky structure; hard, friable, slightly sticky and slightly plastic; common fine roots; common fine vesicular and tubular pores; calcium carbonate is disseminated;

violently effervescent; moderately alkaline; clear smooth boundary.
C2—22 to 34 inches; brown (10YR 5/3) fine sandy loam, brown (10YR 4/3) moist; weak medium and coarse blocky structure; hard, friable, slightly sticky and slightly plastic; few fine roots; common fine vesicular and tubular pores; calcium carbonate is disseminated; violently effervescent; strongly alkaline; gradual smooth boundary.
C3—34 to 60 inches; brown (10YR 5/3) fine sandy loam, dark grayish brown (10YR 4/2) moist; weak medium and coarse blocky structure; hard, friable, slightly sticky and slightly plastic; few fine roots; few fine vesicular and tubular pores; calcium carbonate is disseminated; violently effervescent; strongly alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 9 to 18 percent

A horizon:
Value: 5 or 6 dry, 4 or 5 moist
Chroma: 2 to 4
Texture: loamy fine sand or sandy clay loam
Reaction: moderately alkaline or strongly alkaline

C horizon:
Value: 5 or 6 dry, 4 or 5 moist
Chroma: 2 to 4
Texture: sand, loamy fine sand, fine sandy loam, loam, silt loam, or stratified layers of these textures
Reaction: moderately alkaline or strongly alkaline
Note: Colors may range to 5YR in some areas.

Campspass Series

Map unit(s): 25, 26
Depth class: very deep
Drainage class: well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Landform: mountainsides, plateaus
Parent material: residuum derived from sandstone and shale
Elevation: 6,800 to 7,600 feet (2,073 to 2,316 meters)
Slope: 3 to 25 percent
Climatic data:
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Frost-free period: 65 to 85 days

Taxonomic class: Fine, montmorillonitic Typic Eutroboralfs

Typical Pedon

Map unit in which located: Campspass fine sandy loam, 3 to 12 percent slopes
Location in the survey area: about 1,800 feet north and 925 feet east of the southwest corner of sec. 33, T. 4 N., R. 93 W.

A—0 to 2 inches; grayish brown (10YR 5/2) fine sandy loam, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure parting to moderate medium granular; slightly hard, very friable, nonsticky and nonplastic; many fine and medium roots; mildly alkaline; abrupt smooth boundary.
E—2 to 8 inches; light brownish gray (10YR 6/2) loam, very dark grayish brown (10YR 3/2) moist; weak very coarse platy structure parting to weak medium subangular blocky; hard, friable, slightly sticky and slightly plastic; common fine and medium roots; common fine pores; uncoated sand and silt grains on faces of peds; neutral; abrupt smooth boundary.
Bt—8 to 20 inches; brown (10YR 5/3) clay loam, dark brown (10YR 4/3) moist; moderate medium prismatic structure parting to moderate medium subangular blocky; very hard, firm, sticky and plastic; common fine and medium roots; common faint clay films on faces of peds; 5 percent cobbles; mildly alkaline; clear wavy boundary.
Btk—20 to 25 inches; light yellowish brown (10YR 6/4) clay loam, dark yellowish brown (10YR 4/4) moist; weak coarse subangular blocky structure parting to weak medium subangular blocky; very hard, friable, slightly sticky and plastic; few medium and fine roots; very few faint clay films on faces of peds and on root channels; 5 percent cobbles; strongly effervescent; moderately alkaline; gradual wavy boundary.
Bk—25 to 60 inches; light gray (10YR 7/2) loam, grayish brown (10YR 5/2) moist; massive; hard, friable, slightly sticky and slightly plastic; few fine roots; 5 percent cobbles; strongly effervescent; moderately alkaline.

Range in Characteristics

Depth to argillic horizon: 18 to 30 inches
Depth to secondary calcium carbonate: 18 to 30 inches

A and E horizons:
Reaction: neutral or mildly alkaline

Bt horizon:
Hue: 10YR or 7.5YR
Rock fragment content: 0 to 5 percent
Texture: clay loam or clay

Bk horizon:
Rock fragment content: 0 to 10 percent
Texture: loam or clay loam

Canlodore Series

Map unit(s): 27
Depth class: very deep
Drainage class: well drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Landform: mountainsides
Parent material: glacial deposits derived from sandstone and quartzite
Elevation: 7,800 to 9,200 feet (2,377 to 2,804 meters)
Slope: 15 to 40 percent
Climatic data:
Mean annual precipitation: 18 to 20 inches (457 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Frost-free period: 50 to 75 days

Taxonomic class: Sandy-skeletal, mixed Typic Cryorthents

Typical Pedon

Map unit in which located: Canlodore very cobbly loamy sand, 15 to 40 percent slopes
Location in the survey area: about 2,600 feet north and 2,300 feet east of the southwest corner of sec. 22, T. 12 N., R. 103 W.

Oe—0 to 1 inch; partially decayed needles and twigs.
E—1 inch to 7 inches; pinkish gray (7.5YR 7/2) very cobbly loamy sand, pinkish gray (7.5YR 6/3) moist; weak coarse granular structure; soft, very friable, nonsticky and nonplastic; 20 percent gravel, 15 percent cobbles, 5 percent stones; moderately acid; clear smooth boundary.
EB—7 to 18 inches; pink (7.5YR 7/4) very cobbly loamy sand; light brown (7.5YR 6/4) moist; weak fine subangular blocky structure; soft, very friable, nonsticky and nonplastic; 20 percent gravel, 20 percent cobbles, 5 percent stones; slightly acid; gradual smooth boundary.
Bw—18 to 87 inches; reddish yellow (7.5YR 6/6) very cobbly loamy sand, strong brown (7.5YR 5/6) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; 20 percent gravel, 20 percent cobbles, 5 percent stones; slightly acid; gradual smooth boundary.
BC—28 to 40 inches; reddish yellow (7.5YR 7/6) very cobbly sand, reddish yellow (7.5YR 6/6) moist; single grained; loose, nonsticky and nonplastic; 25 percent gravel, 30 percent cobbles, 5 percent stones; slightly acid; gradual smooth boundary.
C—40 to 60 inches; pink (7.5YR 7/4) very cobbly sand, light brown (7.5YR 6/4) moist; single grained; loose, nonsticky and nonplastic; 25 percent gravel, 30 percent cobbles, 5 percent stones; slightly acid.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 35 to 60 percent
Hue: 7.5YR or 10YR

B horizon:
Reaction: moderately acid or slightly acid
Note: This horizon is absent in some pedons.

C horizon:
Texture: very cobbly loamy sand or very cobbly sand
Reaction: moderately acid or slightly acid.

Carbol Series

Map unit(s): 28, 29
Depth class: shallow
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: concave slopes on plateaus, convex and concave areas on plateaus
Parent material: residuum derived from sandstone
Elevation: 7,500 to 8,500 feet (2,286 to 2,591 meters)
Slope: 3 to 12 percent
Climatic data:
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Frost-free period: 50 to 75 days

Taxonomic class: Loamy, mixed Argic Lithic Cryoborolls

Typical Pedon

Map unit in which located: Carbol-Miracle complex, 3 to 12 percent slopes
Location in the survey area: about 1,800 feet west and 2,000 feet south of the northeast corner of sec. 28, T. 11 N., R. 102 W.

A—0 to 2 inches; reddish gray (5YR 5/2) sandy loam, dark reddish brown (5YR 3/2) moist; moderate fine granular structure; soft, very friable, slightly sticky and nonplastic; 10 percent gravel; neutral; clear smooth boundary.
AB—2 to 10 inches; reddish brown (5YR 5/3) gravelly sandy clay loam, dark reddish brown (5YR 3/3) moist; weak fine and medium subangular blocky structure; slightly hard, very friable, sticky and slightly plastic; 15 percent gravel, 10 percent cobbles; neutral; clear wavy boundary.
Bt—10 to 14 inches; reddish brown (2.5YR 5/4) gravelly sandy clay loam, red (2.5YR 4/6) moist; moderate medium subangular blocky structure parting to weak fine subangular blocky; slightly hard, friable, sticky and slightly plastic; common distinct clay films on faces of peds; 20 percent gravel, 10 percent cobbles; neutral; abrupt wavy boundary.
R—14 inches; hard red sandstone bedrock.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 15 to 30 percent
Depth to lithic contact: 10 to 20 inches
Hue: 2.5YR or 5YR
Reaction: neutral or slightly acid
Thickness of the mollic epipedon: 7 to 10 inches
Note: This soil is outside the range of the Carbol series because it has hues of 2.5YR or 5YR.

Bt horizon:
Clay content: 18 to 27 percent

Carmody Series

Map unit(s): 30
Depth class: moderately deep
Drainage class: somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: hillslopes, plateaus
Parent material: residuum derived from sandstone
Elevation: 6,000 to 6,500 feet (1,829 to 1,981 meters)
Slope: 6 to 15 percent
Climatic data:
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days
Taxonomic class: Coarse-loamy, mixed (calcareous), frigid Ustic Torriorthents

Typical Pedon

Map unit in which located: Carmody-Rock River-Crestman complex, 6 to 15 percent slopes
Location in the survey area: about 2,000 feet south and 500 feet west of the northeast corner of sec. 22, T. 7 N., R. 97 W.

A—0 to 3 inches; yellowish brown (10YR 5/4) loamy fine sand, dark yellowish brown (10YR 4/4) moist; single grained; soft, very friable, nonsticky and nonplastic; mildly alkaline; clear wavy boundary.
AC—3 to 7 inches; yellowish brown (10YR 5/4) fine sandy loam, dark yellowish brown (10YR 4/4) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; strongly effervescent; moderately alkaline; clear wavy boundary.
C1—7 to 15 inches; very pale brown (10YR 7/3) fine sandy loam, brown (10YR 5/3) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; violently effervescent; moderately alkaline; clear wavy boundary.
C2—15 to 23 inches; very pale brown (10YR 7/3) fine sandy loam, brown (10YR 5/3) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; violently effervescent; moderately alkaline; abrupt wavy boundary.
Cr—23 inches; weakly consolidated sandstone bedrock.

Range in Characteristics

Depth to effervescence: 0 to 6 inches
Depth to paralithic contact: 20 to 40 inches
Hue: 10YR to 2.5Y

Castee Series

Map unit(s): 20, 31
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: breaks, plateaus
Parent material: loess deposited on relict fluvial gravel deposits
Elevation: 6,400 to 7,400 feet (1,951 to 2,256 meters)
Slope: 3 to 25 percent

Climatic data:
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Coarse-loamy, carbonatic Borollic Calciorthids

Typical Pedon

Map unit in which located: Castee loam, 3 to 12 percent slopes
Location in the survey area: about 1,200 feet east and 350 feet north of the southwest corner of sec. 28, T. 11 N., R. 97 W.

A—0 to 2 inches; grayish brown (10YR 5/2) loam, dark yellowish brown (10YR 3/4) moist; weak thin platy structure parting to moderate medium granular; soft, very friable, nonsticky and slightly plastic; strongly effervescent; moderately alkaline; abrupt smooth boundary.
Bw—2 to 6 inches; grayish brown (10YR 5/2) loam, brown (10YR 4/3) moist; moderate medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; violently effervescent; moderately alkaline; clear smooth boundary.
Bk1—6 to 12 inches; light yellowish brown (10YR 6/4) loam, yellowish brown (10YR 5/4) moist; weak medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; 25 percent calcium carbonate equivalent; violently effervescent; moderately alkaline; clear smooth boundary.
Bk2—12 to 23 inches; very pale brown (10YR 7/3) loam, brown (10YR 5/3) moist; weak fine subangular blocky structure; hard, friable, slightly sticky and slightly plastic; 40 percent calcium carbonate equivalent; violently effervescent; moderately alkaline; clear smooth boundary.
Bk3—23 to 32 inches; light gray (10YR 7/2) loam, very pale brown (10YR 7/3) moist; massive; hard, friable, sticky and plastic; 50 percent calcium carbonate equivalent; violently effervescent; moderately alkaline; gradual wavy boundary.
2Bk4—32 to 53 inches; white (10YR 8/2) gravelly loam, pinkish gray (7.5YR 7/2) moist; massive; hard, friable, sticky and plastic; 20 percent gravel; 45 percent calcium carbonate equivalent; violently effervescent; moderately alkaline; clear wavy boundary.
2Bk5—53 to 60 inches; white (10YR 8/2) gravelly sandy loam, light gray (10YR 7/2) moist; massive; slightly hard, friable, slightly sticky and nonplastic; 20 percent gravel, 5 percent cobbles; 35 percent calcium carbonate equivalent; violently effervescent; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 18 to 30 percent total clay with 12 to 18 percent noncarbonate clay
Rock fragment content: 5 to 7 percent rock fragments above the 2Bk horizon and 20 to 50 percent within and below the 2Bk horizon
Calcium carbonate equivalent: 40 to 50 percent
Depth to calcic horizon: 6 to 15 inches
Depth to effervescence: 0 to 5 inches

A horizon:
Hue: 7.5YR or 10YR
Rock fragment content: 0 to 7 percent

Bw horizon:
Hue: 7.5YR or 10YR
Rock fragment content: 0 to 7 percent
Reaction: mildly alkaline or moderately alkaline

Bk horizon:
Hue: 7.5YR or 10YR
Texture: loam, clay loam, or sandy loam
Rock fragment content: 0 to 7 percent
Calcium carbonate equivalent: 25 to 50 percent

Upper 2Bk horizon:
Hue: 2.5Y or 10YR
Texture: gravelly sandy loam or gravelly loam
Calcium carbonate equivalent: 20 to 50 percent
Note: The depth to the 2Bk horizons ranges from 30 to 45 inches.

Lower 2BK horizon:
Hue: 2.5Y or 10YR
Texture: gravelly, very gravelly, or very cobbly modifiers of sandy loam or loam
Calcium carbonate equivalent: 20 to 50 percent

Chipeta Series

Map unit(s): 55
Depth class: very shallow to shallow
Drainage class: well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Landform: hills
Position on landform: summits, backslopes
Parent material: residuum derived from shale
Elevation: 5,400 to 6,100 feet (1,646 to 1,859 meters)
Slope: 3 to 35 percent

Climatic data:
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Frost-free period: 90 to 105 days

Taxonomic class: Clayey, mixed (calcareous), mesic, shallow Typic Torriorthents

Typical Pedon

Map unit in which located: Deaver-Chipeta complex, 3 to 35 percent slopes
Location in the survey area: 1,975 feet east and 1,325 feet south of the northwest corner of sec. 31, T. 4 N., R. 99 W.

A—0 to 1 inch; pale yellow (2.5Y 7/4) silty clay loam, light yellowish brown (2.5Y 6/4) moist; moderate thin platy structure parting to moderate fine granular; soft, very friable, very sticky and very plastic; strongly effervescent; moderately alkaline; abrupt smooth boundary.
AC—1 inch to 12 inches; light yellowish brown (2.5Y 6/4) silty clay, light olive brown (2.5Y 5/4) moist; moderate fine subangular blocky structure; hard, friable, very sticky and very plastic; common nests of gypsum; 50 percent 1.0 mm to 0.5 mm soft shale fragments; strongly effervescent; moderately alkaline; clear smooth boundary.
C—12 to 17 inches; light yellowish brown (2.5Y 6/4) silty clay, light olive brown (2.5Y 5/4) moist; medium platy rock structure; hard, firm, very sticky and very plastic; 90 percent 2 mm to 25 mm soft shale fragments; strongly effervescent; strongly alkaline; clear wavy boundary.
Cr—17 inches; weakly consolidated shale bedrock.

Range in Characteristics

Depth to paralithic contact: 5 to 20 inches
Hue: 10YR to 5Y
Reaction: moderately alkaline or strongly alkaline

C horizon:
Texture: silty clay, clay, or silty clay loam

Chroder Series

Map unit(s): 32, 36
Depth class: very deep
Drainage class: well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: fan terraces, plateaus
Parent material: eolian deposits
Elevation: 5,400 to 6,000 feet (1,646 to 1,829 meters)
Slope: 3 to 12 percent
Climatic data:
Mean annual precipitation: 7 to 10 inches (178 to 254 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Frost-free period: 90 to 105 days

Taxonomic class: Coarse-loamy, mixed, mesic Typic Calciorthids

Typical Pedon

Map unit in which located: Clifsand-Chroder complex, 3 to 12 percent slopes
Location in the survey area: about 1,100 feet north and 1,500 feet east of the southwest corner of sec. 21, T. 10 N., R. 103 W.

A—0 to 3 inches; brown (7.5YR 5/4) loamy sand, dark brown (7.5YR 4/4) moist; weak medium platy structure parting to weak thin platy; soft, very friable, nonsticky and nonplastic; mildly alkaline; abrupt smooth boundary.
Bw—3 to 10 inches; pink (7.5YR 7/4) sandy loam, light brown (7.5YR 6/4) moist; weak medium subangular blocky structure; soft, very friable, slightly sticky and nonplastic; strongly effervescent; moderately alkaline; gradual smooth boundary.
Bk1—10 to 26 inches; pinkish white (7.5YR 8/2) sandy loam, pink (7.5YR 7/4) moist; massive; slightly hard, very friable, slightly sticky and slightly plastic; violently effervescent; 20 percent calcium carbonate equivalent; strongly alkaline; gradual wavy boundary.
Bk2—26 to 43 inches; pinkish white (7.5YR 8/2) sandy loam, pink (7.5YR 7/4) moist; massive; slightly hard, very friable, slightly sticky and slightly plastic; violently effervescent; 25 percent calcium carbonate equivalent; strongly alkaline; gradual wavy boundary.
C—43 to 65 inches; pink (7.5YR 7/4) sandy loam, light brown (7.5YR 6/4) moist; massive; loose, slightly sticky and nonplastic; violently effervescent; 13 percent calcium carbonate equivalent; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Calcium carbonate equivalent: 15 to 30 percent
Depth to calcic horizon: 8 to 16 inches
Depth to effervescence: 0 to 4 inches
Hue: 10YR or 7.5YR

A horizon:
Reaction: mildly alkaline or moderately alkaline

Bk and C horizons:
Reaction: moderately alkaline or strongly alkaline

Clapper Series

Map unit(s): 253
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: fan remnants
Parent material: slope alluvium derived from sandstone, limestone, shale, and quartzite
Elevation: 5,400 to 6,200 feet (1,646 to 1,890 meters)
Slope: 2 to 25 percent
Climatic data:
Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Frost-free period: 110 to 140 days

Taxonomic class: Loamy-skeletal, mixed, superactive, mesic Ustic Haplocalcids

Typical Pedon

Map unit in which located: Clapper gravelly loam, 2 to 25 percent slopes, from the Uintah Area, Utah Soil Survey
Location in the survey area: about 2 miles west of Maeser; about 400 feet south and 2,200 feet west of the northeast corner of sec. 25, T. 4 S., R. 20 E.; Vernal N.W., Utah USGS quadrangle; latitude 40 degrees, 28 minutes, 22 seconds north and longitude 109 degrees, 37 minutes, 16 seconds west; NAD 27.

The soil surface is covered by about 20 percent gravel and 10 percent cobbles.

A—0 to 3 inches; strong brown (7.5YR 5/6) gravelly loam, brown (7.5YR 4/4) moist; weak thick platy structure parting to weak fine subangular blocky; slightly hard, friable, slightly sticky and slightly plastic; common very fine roots; few fine and very fine tubular pores; 15 percent gravel and 5 percent cobbles; slightly effervescent; calcium carbonate is disseminated; 5 percent calcium carbonate equivalent; strongly alkaline (pH 8.5); clear smooth boundary. (The horizon ranges from 2 to 8 inches thick.)

Bw—3 to 7 inches; brown (7.5YR 5/4) gravelly loam, brown (7.5YR 4/4) moist; moderate medium subangular blocky structure parting to moderate fine and very fine subangular blocky; slightly hard, friable, slightly sticky and slightly plastic; few very fine, medium, and coarse roots; few fine and common very fine tubular pores; 15 percent gravel and 5 percent cobbles; strongly effervescent; calcium carbonate is disseminated; 16 percent calcium carbonate equivalent; strongly alkaline (pH 8.5); clear smooth boundary. (The horizon ranges from 4 to 11 inches thick.)

Bk1—7 to 13 inches; pink (7.5YR 8/4) gravelly loam, light brown (7.5YR 6/4) moist; weak medium and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; few fine and medium roots; few fine and common very fine tubular pores; 15 percent gravel and 5 percent cobbles; strongly effervescent; calcium carbonate is disseminated and in few thin veins and coatings on underside of rock fragments; 35 percent calcium carbonate equivalent; strongly alkaline (pH 8.6); clear wavy boundary. (The horizon ranges from 0 to 10 inches thick.)

Bk2—13 to 21 inches; pink (7.5YR 8/4) very gravelly loam, light brown (7.5YR 6/4) moist; massive; hard, friable, slightly sticky and slightly plastic; few fine and common very fine roots; few fine and common very fine tubular pores; 25 percent gravel, 10 percent cobbles, and 5 percent stones; violently effervescent; calcium carbonate is disseminated and in few thin veins and in 1 to 3 mm thick coatings on underside of rock fragments; 38 percent calcium carbonate equivalent; strongly alkaline (pH 8.8); gradual wavy boundary. (The horizon ranges from 5 to 25 inches thick.)

Bk3—21 to 36 inches; pink (7.5YR 8/4) very gravelly loam, light brown (7.5YR 6/4) moist; massive; very hard, friable, slightly sticky and slightly plastic; few very fine and fine roots; few fine and many very fine tubular pores; 20 percent gravel, 10 percent cobbles, and 5 percent stones; strongly effervescent; calcium carbonate is disseminated and in many coarse nodules; 31 percent calcium carbonate equivalent; strongly alkaline (pH 9.0); gradual wavy boundary. (The horizon ranges from 0 to 18 inches thick.)

Bk4—36 to 49 inches; pink (7.5YR 7/4) very cobbly loam, brown (7.5YR 5/4) moist; massive; hard, friable, slightly sticky and slightly plastic; few very and fine roots; common very fine and fine tubular pores; 35 percent gravel and 20 percent cobbles; slightly effervescent; 21 percent calcium carbonate equivalent) calcium carbonate is disseminated and in few fine veins and 1 to 3 mm

thick coatings on rock fragments; strongly alkaline (pH 8.9); clear wavy boundary. (The horizon ranges from 5 to 18 inches thick.)

Bk5—49 to 60 inches; pink (7.5YR 7/4) extremely cobbly sandy clay loam, brown (7.5YR 5/4) moist; massive; very hard, friable, moderately sticky and moderately plastic; few very fine roots; common fine and many very fine tubular pores; 25 percent gravel and 35 percent cobbles; slightly effervescent; calcium carbonate is disseminated and in few medium and coarse veins; 19 percent calcium carbonate equivalent; strongly alkaline (pH 8.9). (The horizon ranges from 0 to 25 inches thick.)

Range in Characteristics

Particle-size control section (weighted average):
- *Clay content:* 18 to 27 percent
- *Rock fragment content:* 35 to 70 percent rounded gravel and cobbles derived from sandstone, quartzite, and limestone
- *Surface rock fragments:* 20 to 70 percent gravel and cobbles

Depth to calcic horizon: 6 to 19 inches
Mean annual soil temperature: 47 to 51 degrees F
Moisture control section: is affected by precipitation that is evenly distributed throughout the year with a slight increase in late summer and early fall
Moisture regime: aridic bordering on ustic

A horizon:
- *Hue:* 7.5YR or 10YR
- *Value:* 5 or 6 dry, 3 to 5 moist
- *Chroma:* 2 to 6 dry or moist
- *Texture:* very cobbly loam or gravelly loam
- *Rock fragment content:* 15 to 50 percent gravel or cobbles
- *Calcium carbonate equivalent:* 5 to 15 percent
- *Reaction:* moderately alkaline or strongly alkaline

Bw horizon:
- *Hue:* 7.5YR or 10YR
- *Value:* 5 to 7 dry, 4 or 5 moist
- *Chroma:* 2 to 5 dry or moist
- *Texture:* gravelly loam or very cobbly loam
- *Rock fragment content:* 15 to 59 percent gravel, cobbles, and stones
- *Calcium carbonate equivalent:* 10 to 40 percent
- *Reaction:* moderately alkaline or strongly alkaline

Upper Bk horizons:
- *Hue:* 7.5YR or 10YR
- *Value:* 5 to 7 dry, 4 or 5 moist
- *Chroma:* 2 to 5 dry or moist
- *Texture:* very cobbly loam, very cobbly sandy clay loam, extremely cobbly loam, or extremely gravelly loam
- *Rock fragment content:* 35 to 70 percent gravel, cobbles, or stones
- *Calcium carbonate equivalent:* 15 to 40 percent
- *Reaction:* moderately alkaline or strongly alkaline

Lower Bk horizons:
- *Hue:* 7.5YR or 10YR
- *Value:* 6 to 8 dry, 4 to 7 moist
- *Chroma:* 1 to 6 dry or moist
- *Texture:* very cobbly sandy loam, extremely cobbly sandy clay loam, very cobbly loam, or extremely cobbly sandy loam
- *Rock fragment content:* 35 to 70 percent gravel, cobbles, and stones
- *Calcium carbonate equivalent:* 10 to 30 percent
- *Reaction:* moderately alkaline or strongly alkaline

Clayburn Series

Map unit(s): 33, 34, 35, 97, 221
Local phase(s): warm
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: drainageways, mountainsides, plateaus
Position on landform: backslopes, footslopes
Parent material: colluvium and residuum derived from interbedded shale and sandstone
Elevation: 7,000 to 9,000 feet (2,134 to 2,743 meters)
Slope: 3 to 55 percent
Climatic data:
- *Mean annual precipitation:* 16 to 20 inches (406 to 508 millimeters)
- *Mean annual air temperature:* 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
- *Frost-free period:* 50 to 75 days

Taxonomic class: Fine-loamy, mixed Argic Pachic Cryoborolls

Typical Pedon

Map unit in which located: Clayburn loam, warm, 3 to 25 percent slopes
Location in the survey area: about 1,000 feet west and 50 feet north of the southeast corner of sec. 9, T. 5 N., R. 91 W.

A1—0 to 4 inches; grayish brown (10YR 5/2) loam, very dark gray (10YR 3/1) moist; moderate fine granular structure; soft, very friable, slightly sticky and slightly plastic; neutral; clear smooth boundary.

A2—4 to 11 inches; grayish brown (10YR 5/2) loam, very dark grayish brown (10YR 3/2) moist; moderate very fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; neutral; clear smooth boundary.
BA—11 to 17 inches; grayish brown (10YR 5/2) clay loam, very dark grayish brown (10YR 3/2) moist; strong fine angular blocky structure; hard, friable, sticky and plastic; neutral; clear wavy boundary.
Bt1—17 to 32 inches; brown (10YR 5/3) clay loam, dark yellowish brown (10YR 4/4) moist; strong medium and coarse angular blocky structure; very hard, firm, sticky and plastic; many distinct clay films on faces of peds; neutral; clear wavy boundary.
Bt2—32 to 40 inches; light yellowish brown (10YR 6/4) clay loam, dark yellowish brown (10YR 4/4) moist; grayish brown (10YR 5/2) coatings on peds; moderate very coarse angular blocky structure; very hard, firm, sticky and plastic; common distinct clay films on faces of peds; neutral; gradual wavy boundary.
BC—40 to 46 inches; brownish yellow (10YR 6/6) clay loam; yellowish brown (10YR 5/6) moist; weak very coarse subangular blocky structure; very hard, firm, sticky and plastic; neutral; gradual wavy boundary.
C—46 to 60 inches; brownish yellow (10YR 6/6) loam, yellowish brown (10YR 5/6) moist; massive; very hard, firm, sticky and plastic; mildly alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 0 to 15 percent
Depth to argillic horizon: 40 to 50 inches
Thickness of the mollic epipedon: 16 to 24 inches
Note: The Clayburn soil in the map units #97 of Heathcoat-Clayburn complex, 5 to 35 percent slopes, very stony and #221 Youga-Gelkie-Clayburn, warm, complex, 25 to 45 percent slopes, extremely bouldery is outside of the range of the Clayburn series because it is dry in the moisture control section for a longer period of time. The average annual precipitation of these map units is 16 to 18 inches.

A horizon:
Reaction: neutral or slightly acid

Bt horizon:
Hue: 7.5YR or 10YR
Texture: clay loam or sandy clay loam
Reaction: neutral or slightly acid

C horizon:
Hue: 7.5YR or 10YR
Texture: gravelly loam, fine sandy loam, or loam
Reaction: slightly acid to mildly alkaline

Cliff Series

Map unit(s): 254
Depth class: very deep
Drainage class: well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: alluvial flats
Parent material: alluvium derived from sandstone, limestone, shale, and quartzite
Elevation: 5,400 to 6,400 feet (1,646 to 1,951 meters)
Slope: 2 to 4 percent
Climatic data:
Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Frost-free period: 110 to 140 days

Taxonomic class: Coarse-loamy, mixed, superactive, calcareous, mesic Ustic Torriorthents

Typical Pedon

Map unit in which located: Cliff sandy loam, 2 to 4 percent slopes, from the Uintah Area, Utah Soil Survey
Location in the Uintah Area, Utah survey area: about 5 miles north of Dinosaur Quarry; about 2,400 feet east and 1,100 feet south of the northwest corner of sec. 1, T. 4 S., R. 23 E., SLBM; Jensen Ridge, Utah USGS quadrangle; latitude 40 degrees, 30 minutes, 18 seconds north and longitude 109 degrees, 16 minutes, 48 seconds west; NAD 27.

A—0 to 4 inches; yellowish brown (10YR 5/4) sandy loam, dark yellowish brown (10YR 4/4) moist; weak thin platy structure that parts to weak very fine subangular blocky; slightly hard, very friable, slightly sticky and nonplastic; few medium and fine, common very fine roots; few fine, many very fine random tubular pores; very slightly effervescent; 3 percent calcium carbonate equivalent; calcium carbonate is disseminated; moderately alkaline (pH 8.2); clear smooth boundary. (The horizon ranges from 3 to 4 inches thick.)
C1—4 to 14 inches; light yellowish brown (10YR 6/4) sandy loam, yellowish brown (10YR 5/4) moist; weak medium subangular blocky structure; slightly hard, very friable, slightly sticky and nonplastic; few medium and fine, common very

fine roots; few fine, many very fine random tubular pores; slightly effervescent; 4 percent calcium carbonate equivalent; calcium carbonate is disseminated; strongly alkaline (pH 8.6) clear wavy boundary. (The horizon ranges from 10 to 12 inches thick.)

C2—14 to 34 inches; yellowish brown (10YR 5/4) sandy loam, dark yellowish brown (10YR 4/4) moist; weak medium subangular blocky structure; loose, slightly sticky and nonplastic; few medium, fine and very fine roots; few fine and common very fine random tubular pores; slightly effervescent; 5 percent calcium carbonate equivalent; calcium carbonate is disseminated; strongly alkaline (pH 8.6); clear wavy boundary. (The horizon ranges from 11 to 20 inches thick.)

C3—34 to 60 inches; light yellowish brown (10YR 6/4) sandy loam, yellowish brown (10YR 5/4) moist; single grain; loose, slightly sticky and nonplastic; few fine and very fine roots; few fine common very fine random tubular pores; slightly effervescent; 5 percent calcium carbonate equivalent; calcium carbonate is disseminated; strongly alkaline (pH 8.6).

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 5 to 18 percent
Rock fragment content: 0 to 15 percent sandstone, limestone, and quartzite gravel
Mean annual soil temperature: 47 to 51 degrees F.
Moisture control section: is affected by precipitation that falls evenly throughout the year with a slight increase in late summer and early fall
Moisture regime: aridic bordering on ustic

A horizon:
Hue: 10YR or 2.5Y
Value: 5 or 6 dry, 4 or 5 moist
Chroma: 2 to 4 dry or moist
Texture: sandy loam
Rock fragment content: 0 to 14 percent gravel
Calcium carbonate equivalent: 1 to 10 percent
Reaction: moderately alkaline or strongly alkaline

C horizon:
Hue: 10YR or 2.5Y
Value: 5 to 7 dry, 3 to 5 moist
Chroma: 3 to 5 dry or moist
Texture: sandy loam, or some pedons are stratified loamy sand to loam
Rock fragment content: 0 to 14 percent gravel
Calcium carbonate equivalent: 4 to 15 percent
Reaction: moderately alkaline or strongly alkaline

Clifsand Series

Map unit(s): 36
Depth class: very deep
Drainage class: well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: fan terraces
Parent material: alluvium derived from sedimentary rocks
Elevation: 5,400 to 6,000 feet (1,646 to 1,829 meters)
Slope: 3 to 12 percent
Climatic data:
Mean annual precipitation: 7 to 10 inches (178 to 254 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Frost-free period: 90 to 105 days

Taxonomic class: Loamy-skeletal, mixed, mesic Typic Calciorthids

Typical Pedon

Map unit in which located: Clifsand-Chroder complex, 3 to 12 percent slopes
Location in the survey area: about 1,000 feet east and 1,500 feet north of the southwest corner of sec. 21, T. 10 N., R. 103 W.

A—0 to 2 inches; yellowish brown (10YR 5/4) loamy sand, dark brown (10YR 4/3) moist; weak medium platy structure parting to weak thin platy; soft, very friable, nonsticky and nonplastic; slightly effervescent; moderately alkaline; abrupt smooth boundary.

Bw—2 to 13 inches; light brown (7.5YR 6/4) sandy loam, brown (7.5YR 5/4) moist; weak medium subangular blocky structure; soft, very friable, slightly sticky and nonplastic; 5 percent gravel, 5 percent cobbles; violently effervescent; moderately alkaline, gradual smooth boundary.

Bk1—13 to 43 inches; pinkish white (7.5YR 8/2) very cobbly sandy loam, pink (7.5YR 7/4) moist; massive; slightly hard, friable; slightly sticky, and nonplastic; 30 percent gravel, 30 percent cobbles; 35 percent calcium carbonate equivalent; violently effervescent; moderately alkaline; clear wavy boundary.

Bk2—43 to 60 inches; light reddish brown (5YR 6/4) extremely stony sand; reddish brown (5YR 5/4) moist; single grained; loose, nonsticky and nonplastic; 20 percent gravel, 20 percent cobbles, 30 percent stones; few coatings of calcium

carbonate on rock fragments; strongly effervescent; strongly alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 10 to 18 percent
Rock fragment content: 45 to 75 percent
Calcium carbonate equivalent: 15 to 35 percent
Depth to effervescence: 0 to 3 inches
Note: This soil is outside the range of the Clifsand series because it has a frost-free period of 90 to 105 days.

A horizon:
Hue: 10YR or 7.5YR

Bk1 horizon:
Hue: 10YR or 7.5YR
Texture: very cobbly sandy loam or extremely cobbly sandy loam
Reaction: moderately alkaline or strongly alkaline

Bk2 horizon:
Hue: 7.5YR or 5YR
Texture: very cobbly sandy loam, very cobbly loamy sand, or extremely stony sand
Reaction: moderately alkaline or strongly alkaline

Clyl Series

Map unit(s): 249, 255
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: mountain slopes
Position on landform: backslopes
Parent material: colluvium, slope alluvium derived from dolomitic limestone
Elevation: 7,000 to 9,000 feet (2,134 to 2,743 meters)
Slope: 15 to 65 percent
Climatic data:
Mean annual precipitation: 14 to 22 inches (356 to 559 millimeters)
Mean annual air temperature: 40 to 45 degrees F. (4.4 to 7.2 degrees C.)
Frost-free period: 70 to 95 days

Taxonomic class: Loamy-skeletal, carbonatic, frigid Typic Calciustolls

Typical Pedon

Map unit in which located: Clyl-Pinerid association, 8 to 40 percent slopes, from the Uintah Area, Utah Soil Survey

Location in the Uintah Area, Utah survey area: about 1,700 feet west and 2,400 feet north of the southeast corner of section 3, T. 2 S., R. 24 E., SLBM latitude 40 degrees, 40 minutes, 30 seconds N. and longitude 109 degrees, 12 minutes, 26 seconds W.

The soil surface is covered with 35 percent flagstones and channers.

A1—0 to 2 inches; dark brown (7.5YR 3/2) channery silt loam, black (5YR 2.5/1) moist; weak very fine granular structure; soft, very friable, nonsticky and nonplastic; common medium, many fine and very fine roots; many fine and very fine tubular pores; 15 percent channers; very slightly effervescent; 2 percent calcium carbonate equivalent: calcium carbonate is disseminated; moderately alkaline; clear smooth boundary.
A2—2 to 9 inches; brown (7.5YR 4/2) channery silt loam, very dark gray (5YR 3/1) moist; weak medium and fine subangular blocky structure parting to weak fine granular; soft, very friable, nonsticky and nonplastic; few coarse, common medium, many fine and very fine roots; many fine and very fine tubular pores; 5 percent gravel and 25 percent channers; slightly effervescent; 2 percent calcium carbonate equivalent; calcium carbonate is disseminated and segregated as common fine nodules; moderately alkaline; clear wavy boundary.
Bk1—9 to 19 inches; reddish brown (5YR 5/3) very channery silt loam, reddish brown (5YR 4/3) moist; weak fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common coarse and medium, many fine, and few very fine roots; common medium, fine, and very fine tubular pores; 20 percent gravel and 30 percent channers; strongly effervescent; 34 percent calcium carbonate equivalent; calcium carbonate is disseminated and segregated as 1 to 3 mm. thick coatings on underside of rock fragments; moderately alkaline; gradual wavy boundary.
Bk2—19 to 29 inches; pinkish gray (5YR 7/2) very channery loam, reddish brown (5YR 5/3) moist; massive; hard, firm, slightly sticky and slightly plastic; common medium, many fine and very fine roots; few fine and very fine tubular pores; 10 percent gravel and 40 percent channers; strongly effervescent; 46 percent calcium carbonate equivalent; calcium carbonate is disseminated and segregated as 1 to 3 mm. thick coatings on

underside of rock fragments; moderately alkaline; clear wavy boundary.

Bk3—29 to 60 inches; pinkish gray (7.5YR 7/2) extremely flaggy loam, light brown (7.5YR 6/4) moist; massive; hard, friable, slightly sticky and slightly plastic; few medium, fine, and very fine roots; few very fine tubular pores; 25 percent channers, 35 percent flagstones, and 20 percent stones; strongly effervescent; 47 percent calcium carbonate equivalent; calcium carbonate is disseminated and segregated as 1 to 3 mm. thick coatings on undersides of rock fragments; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 18 to 27 percent
Rock fragment content: 50 to 80 percent
Calcium carbonate equivalent: 40 to 60 percent
Depth to calcic horizon: 9 to 20 inches
Thickness of the mollic epipedon: 7 to 15 inches

A horizon:
Value: 2 or 3 moist
Chroma: 1 to 3
Texture: channery silt loam or very channery silt loam
Effervescence: noneffervescent in the upper part and slightly effervescent in the lower part
Reaction: slightly alkaline or moderately alkaline

Bk horizon:
Chroma: 2 to 4
Texture: silt loam or loam modified by 50 to 80 percent channers or flagstones

Typical Pedon

Map unit in which located: Clyl-Pinerid association, 8 to 40 percent slopes, from the Uintah Area, Utah Soil Survey Area

Location in the Uintah Area, Utah survey area: about 30 miles northeast of Vernal on Diamond Mountain; about 1,700 feet west and 2,400 feet north of the southeast corner of sec. 3, T. 2 S., R. 24 E., SLBM; Crouse Reservoir, Utah USGS quadrangle; latitude 40 degrees, 40 minutes, 30 seconds north and longitude 109 degrees, 12 minutes, 26 seconds west; NAD 27.

The soil surface is covered by 35 percent flagstones and channers.

A1—0 to 2 inches; dark brown (7.5YR 3/2) channery silt loam, black (5YR 2.5/1) moist; weak very fine granular structure; soft, very friable, nonsticky and nonplastic; common medium, many fine and very fine roots; many fine and very fine tubular pores; 15 percent channers; very slightly effervescent; 2 percent calcium carbonate equivalent; calcium carbonate is disseminated; moderately alkaline (pH 8.0); clear smooth boundary. (The horizon ranges from 2 to 4 inches thick.)

A2—2 to 9 inches; brown (7.5YR 4/2) channery silt loam, very dark gray (5YR 3/1) moist; weak, medium and fine subangular blocky structure parting to weak fine granular; soft, very friable, nonsticky and nonplastic; few coarse, common medium, many fine and very fine roots; many fine and very fine tubular pores; 5 percent gravel and 25 percent channers; slightly effervescent; 2 percent calcium carbonate equivalent; calcium carbonate is disseminated and segregated as common fine nodules; moderately alkaline (pH 8.0); clear wavy boundary. (The horizon ranges from 5 to 7 inches thick.)

Bk1—9 to 19 inches; reddish brown (5YR 5/3) very channery silt loam, reddish brown (5YR 4/3) moist; weak fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common coarse and medium, many fine and few very fine roots; common medium, fine, and very fine tubular pores; 20 percent gravel and 30 percent channers; strongly effervescent; 34 percent calcium carbonate equivalent; calcium carbonate is disseminated and segregated as 1 to 3 mm thick coatings on underside of rock fragments; moderately alkaline (pH 8.1); gradual wavy boundary. (The horizon ranges from 6 to 12 inches thick.)

Bk2—19 to 29 inches; pinkish gray (5YR 7/2) very channery loam, reddish brown (5YR 5/3) moist; massive; hard, firm, slightly sticky and slightly plastic; common medium, many fine and very fine roots; few fine and very fine tubular pores; 10 percent gravel and 40 percent channers; strongly effervescent; 46 percent calcium carbonate equivalent; calcium carbonate is disseminated and segregated as 1 to 3 mm thick coatings on underside of rock fragments; moderately alkaline (pH 8.2); clear wavy boundary. (The horizon ranges from 10 to 18 inches thick.)

Bk3—29 to 60 inches; pinkish gray (7.5YR 7/2) extremely flaggy loam, light brown (7.5YR 6/4) moist; massive; hard, friable, slightly sticky and slightly plastic; few medium, fine, and very fine roots; few very fine tubular pores; 25 percent channers, 35 percent flagstones, and 20 percent stones; strongly effervescent; 47 percent calcium carbonate equivalent; calcium carbonate is

disseminated and segregated as 1 to 3 mm thick coatings on underside of rock fragments; moderately alkaline (pH 8.3).

Range in Characteristics

Particle-size control section (weighted average):
- *Clay content:* 18 to 27 percent
- *Rock fragment content:* 50 to 80 percent gravel, channers, flagstones, and stones from dolomitic limestone
- *Calcium carbonate equivalent:* 40 to 60 percent in the material less than 20 mm in size in the mineralogy control section; the dolomitic limestone rock fragments are 80 to 90 percent carbonates

Depth to calcic horizon: 9 to 20 inches
Mean annual soil temperature: 42 to 45 degrees F.
Moisture control section: is affected by precipitation that is evenly distributed throughout the year with a slight increase during late summer and fall
Moisture regime: typic ustic
Surface rock fragments: channers, flagstones, and stones from dolomitic limestone
Thickness of the mollic epipedon: 7 to 15 inches
Note: These soils are calcareous to the surface after crushing and mixing the whole soil less than 20 mm in size to a depth of 7 inches.

A horizon
- *Hue:* 7.5YR or 5YR
- *Value:* 3 or 4 dry, 2 or 3 moist
- *Chroma:* 2 or 3 dry, 1 or 2 moist
- *Texture:* channery silt loam
- *Rock fragment content:* 15 to 35 percent gravel, channers, flagstones, or stones
- *Calcium carbonate equivalent:* 1 to 10 percent after mixing to 7 inches
- *Reaction:* slightly alkaline or moderately alkaline

Bk horizon:
- *Hue:* 7.5YR or 5YR
- *Value:* 5 to 7 dry, 4 to 6 moist
- *Chroma:* 2 to 4 dry or moist
- *Texture:* very channery silt loam, very channery loam, extremely flaggy loam, or extremely channery silt loam
- *Rock fragment content:* 50 to 80 percent, predominantly channers and flagstones, with some stones and gravel
- *Calcium carbonate equivalent:* 10 to 40 percent in the less than 2 mm fraction, 40 to 60 percent in the less than 20 mm fraction
- *Reaction:* moderately alkaline

Cochetopa Series

Map unit(s): 37, 38, 39, 40, 41, 42, 108, 167
Local phase(s): warm
Depth class: very deep
Drainage class: well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Landform: hills, hillslopes, mountainsides, plateaus, concave positions on plateaus
Position on landform: backslopes, footslopes
Parent material: colluvium derived from shale, loess and residuum derived from shale, residuum derived from sandstone and shale, residuum derived from shale
Elevation: 7,000 to 8,600 feet (2,134 to 2,621 meters)
Slope: 3 to 65 percent
Climatic data:
- *Mean annual precipitation:* 16 to 20 inches (406 to 508 millimeters)
- *Mean annual air temperature:* 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
- *Frost-free period:* 50 to 75 days

Taxonomic class: Fine, montmorillonitic Argic Pachic Cryoborolls

Typical Pedon

Map unit in which located: Cochetopa loam, warm, 3 to 12 percent slopes
Location in the survey area: about 1,250 feet west and 1,700 feet south of the northeast corner of sec. 19, T. 9 N., R. 89 W.

A1—0 to 4 inches; very dark grayish brown (10YR 3/2) loam, very dark brown (10YR 2/2) moist; moderate fine granular structure; soft, very friable, nonsticky and nonplastic; neutral; gradual wavy boundary.
A2—4 to 11 inches; dark grayish brown (10YR 4/2) loam, very dark brown (10YR 2/2) moist; weak medium subangular blocky structure parting to moderate fine granular; slightly hard, friable, slightly sticky and slightly plastic; neutral; clear wavy boundary.
BA—11 to 19 inches; dark grayish brown (10YR 4/2) clay loam, very dark brown (10YR 2/2) moist; moderate medium and coarse subangular blocky structure; hard, friable, sticky and plastic; neutral; clear smooth boundary.
Bt1—19 to 32 inches; brown (7.5YR 4/4) clay loam, dark brown (7.5YR 4/4) moist; moderate medium prismatic structure parting to strong medium angular blocky; hard, firm, very sticky and plastic;

common distinct clay films on faces of peds and along interstitial pores; neutral; clear smooth boundary.
Bt2—32 to 48 inches; brown (7.5YR 5/4) clay loam, dark brown (7.5YR 4/4) moist; moderate medium prismatic structure parting to strong medium angular blocky; hard, firm, very sticky and plastic; common distinct clay films on faces of peds and along interstitial pores; neutral; gradual smooth boundary.
BC—48 to 60 inches; yellowish brown (10YR 5/4) clay loam, dark yellowish brown (10YR 4/4) moist; weak medium prismatic structure parting to weak medium subangular blocky; hard, friable, sticky and plastic; neutral.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 0 to 15 percent
Thickness of the mollic epipedon: 16 to 24 inches

Bt horizon:
Hue: 10YR or 7.5YR
Texture: clay loam or clay
Reaction: neutral or slightly acid

BC horizon:
Texture: clay loam or clay
Reaction: slightly acid or neutral

Coldspring Series

Map unit(s): 43, 133
Local phase(s): moist
Depth class: deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: plateaus, concave areas on plateaus
Parent material: residuum derived from sandstone
Elevation: 7,500 to 8,500 feet (2,286 to 2,591 meters)
Slope: 1 to 12 percent
Climatic data:
Mean annual precipitation: 16 to 20 inches (406 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Frost-free period: 50 to 75 days

Taxonomic class: Fine-loamy, mixed Argic Cryoborolls

Typical Pedon

Map unit in which located: Miracle-Coldspring complex, 3 to 12 percent slopes
Location in the survey area: about 1,050 feet south and 350 feet east of the northwest corner of sec. 15, T. 11 N., R. 103 W.

A1—0 to 3 inches; reddish brown (5YR 4/3) loam, dark reddish brown (5YR 3/2) moist; weak fine granular structure; soft, very friable, nonsticky and nonplastic; 5 percent gravel; neutral; clear wavy boundary.
A2—3 to 14 inches; reddish brown (5YR 4/3) loam, dark reddish brown (5YR 3/2) moist; weak medium subangular blocky structure parting to moderate fine granular; slightly hard, friable, slightly sticky and slightly plastic; 5 percent gravel; neutral; clear wavy boundary.
Bt1—14 to 18 inches; reddish brown (2.5YR 4/4) clay loam, reddish brown (2.5YR 4/4) moist; moderate medium and coarse subangular blocky structure; hard, friable, sticky and plastic; common distinct clay films on faces of peds; 10 percent gravel; mildly alkaline; clear wavy boundary.
Bt2—18 to 26 inches; reddish brown (2.5YR 5/4) clay loam, dark reddish brown (2.5YR 4/4) moist; moderate medium and coarse subangular blocky structure; hard, friable, sticky and plastic; common distinct clay films on faces of peds; 10 percent gravel; mildly alkaline; clear wavy boundary.
BCt—26 to 34 inches; red (2.5YR 5/6) clay loam, reddish brown (2.5YR 4/4) moist; moderate medium subangular blocky structure; hard, friable, sticky and plastic; common distinct clay films on faces of peds; 40 percent weakly consolidated sandstone fragments; 10 percent gravel; mildly alkaline; clear wavy boundary.
C—34 to 47 inches; red (2.5YR 5/6) gravelly sandy clay loam, reddish brown (2.5YR 4/4) moist; massive; hard, friable, sticky and plastic; 20 percent gravel, 10 percent cobbles; mildly alkaline; clear wavy boundary.
R—47 inches; hard sandstone.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 0 to 15 percent
Depth to lithic contact: 40 to 60 inches

Reaction: neutral or mildly alkaline
Thickness of the mollic epipedon: 10 to 15 inches
Note: The soil is noneffervescent throughout.

A horizon:
Hue: 5YR or 7.5YR

Bt horizon:
Hue: 2.5YR or 5YR
Texture: loam, sandy clay loam, or clay loam

C horizon:
Hue: 2.5YR or 5YR
Texture: sandy loam, loam, or sandy clay loam with gravelly or cobbly modifiers

Cortyzack Series

Map unit(s): 57, 256, 257, 258
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: hills
Position on landform: shoulders, toeslopes
Parent material: eolian deposits and alluvium derived from sandstone, eolian deposits over slope alluvium derived from sandstone, limestone, shale, and quartzite
Elevation: 6,800 to 8,500 feet (2,073 to 2,591 meters)
Slope: 1 to 25 percent
Climatic data:
Mean annual precipitation: 15 to 22 inches (381 to 559 millimeters)
Mean annual air temperature: 40 to 45 degrees F. (4.4 to 7.2 degrees C.)
Frost-free period: 70 to 95 days

Taxonomic class: Fine-loamy, mixed Typic Argiborolls

Typical Pedon

Map unit in which located: Detra-Cortyzack complex, 1 to 12 percent slopes
Location in the survey area: about 1,320 feet north and 2,400 feet west of the southeast corner of sec. 19, T. 7 N., R. 100 W.

A1—0 to 2 inches; brown (7.5YR 4/4) fine sandy loam, dark brown (7.5YR 3/2) moist; weak fine subangular blocky structure parting to moderate medium granular; soft, very friable, slightly sticky and slightly plastic; neutral; clear smooth boundary.
A2—2 to 9 inches; brown (7.5YR 4/4) fine sandy loam, dark brown (7.5YR 3/2) moist; weak medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; neutral; clear smooth boundary.
Bt—9 to 21 inches; reddish brown (5YR 5/4) sandy clay loam, reddish brown (5YR 4/4) moist; weak medium subangular blocky structure parting to moderate fine subangular blocky; hard, friable, sticky and slightly plastic; common faint clay films on faces of peds; mildly alkaline; clear wavy boundary.
Btk—21 to 24 inches; light reddish brown (5YR 6/4) sandy clay loam, reddish brown (5YR 4/4) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; slightly hard, friable, sticky and slightly plastic; few faint clay films on faces of peds; few fine threads of calcium carbonate; slightly effervescent; mildly alkaline; abrupt wavy boundary.
Bk1—24 to 45 inches; pink (5YR 7/4) sandy clay loam, light reddish brown (7.5YR 6/4) moist; weak medium subangular blocky structure; slightly hard, friable, sticky and slightly plastic; 25 percent calcium carbonate equivalent; calcium carbonate disseminated and in common fine threads; violently effervescent; moderately alkaline; clear wavy boundary.
Bk2—45 to 60 inches; light reddish brown (5YR 6/4) sandy clay loam, reddish brown (5YR 4/4) moist; weak medium subangular blocky structure; soft, very friable, sticky and slightly plastic; 10 percent calcium carbonate equivalent; common fine filaments of calcium carbonate; strongly effervescent; moderately alkaline.

Range in Characteristics

Calcium carbonate equivalent: 15 to 30 percent
Depth to calcic horizon: 20 to 30 inches
Thickness of the mollic epipedon: 8 to 14 inches

A horizon:
Reaction: neutral or mildly alkaline

Bt horizon:
Reaction: neutral or mildly alkaline

Bk horizons:
Texture: fine sandy loam or sandy clay loam

Cowestglen Series

Map unit(s): 44
Depth class: very deep
Drainage class: well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)

Landform: flood plains, terraces
Parent material: alluvium derived from mixed sources
Elevation: 6,000 to 6,800 feet (1,829 to 2,073 meters)
Slope: 0 to 3 percent
Climatic data:
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Coarse-loamy, mixed (calcareous), frigid Ustic Torrifluvents

Typical Pedon

Map unit in which located: Cowestglen sandy loam, 0 to 3 percent slopes
Location in the survey area: about 1,100 feet east and 200 feet south of the northwest corner of sec. 26, T. 6 N., R. 94 W.

A1—0 to 5 inches; pale brown (10YR 6/3) sandy loam, dark grayish brown (10YR 4/2) moist; weak medium subangular blocky structure parting to moderate medium granular; hard, friable, slightly sticky and slightly plastic; slightly effervescent; moderately alkaline; abrupt smooth boundary.
A2—5 to 9 inches; dark grayish brown (10YR 4/2) fine sandy loam, very dark gray (10YR 3/1) moist; weak medium subangular blocky structure parting to moderate medium granular; slightly hard, friable, slightly sticky and slightly plastic; strongly effervescent; moderately alkaline; abrupt smooth boundary.
C1—9 to 25 inches; light brownish gray (2.5Y 6/2) fine sandy loam, dark brown (10YR 4/3) moist; weak coarse subangular blocky structure parting to weak medium granular; slightly hard, very friable, slightly sticky and slightly plastic; strongly effervescent; strongly alkaline; abrupt smooth boundary.
C2—25 to 42 inches; light brownish gray (2.5Y 6/2) loamy sand; dark brown (10YR 4/3) moist; massive; soft, very friable, nonsticky and nonplastic; strongly effervescent; strongly alkaline; abrupt smooth boundary.
C3—42 to 55 inches; grayish brown (2.5Y 5/2) fine sandy loam, dark grayish brown (10YR 4/2) moist; massive; slightly hard, very friable, slightly sticky and nonplastic; strongly effervescent; strongly alkaline; abrupt smooth boundary.
C4—55 to 60 inches; brown (10YR 5/3) loamy sand, dark yellowish brown (10YR 4/4) moist; massive; soft, very friable, nonsticky and nonplastic; strongly effervescent; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 5 to 18 percent
Rock fragment content: generally free of rock fragments; some pedons have thin strata containing 10 to 20 percent gravel predominantly less than 1 inch in diameter
Depth to effervescence: throughout; some pedons may be noneffervescent to a depth of 6 inches
Depth to a seasonal high water table: 40 to 60 inches from April through June in areas along the Yampa River
Hue: 10YR or 2.5Y

C horizons:
Texture: stratified fine sandy loam, sandy loam, loamy sand, sand, sandy clay loam, or loam
Reaction: moderately alkaline or strongly alkaline

Coyet Series

Map unit(s): 45, 46, 47, 172
Depth class: very deep
Drainage class: excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: alluvial fans, hills, hillslopes
Parent material: alluvium and residuum derived from sandstone, eolian deposits and alluvium derived from sandstone, eolian deposits and in residuum derived from sandstone
Elevation: 5,800 to 7,200 feet (1,768 to 2,195 meters)
Slope: 3 to 50 percent
Climatic data:
Mean annual precipitation: 11 to 14 inches (279 to 356 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Mixed, frigid Ustic Torripsamments

Typical Pedon

Map unit in which located: Coyet loamy sand, 12 to 25 percent slopes
Location in the survey area: about 1,300 feet north and 1,400 feet east of the southwest corner of sec. 17, T. 7 N., R. 94 W.

A—0 to 6 inches; yellowish brown (10YR 5/4) loamy sand, brown (10YR 4/3) moist; weak medium granular structure parting to weak fine granular; soft, very friable, nonsticky and nonplastic; many

fine and medium roots; mildly alkaline; clear smooth boundary.
Bk1—6 to 22 inches; light yellowish brown (10YR 6/4) loamy sand, dark yellowish brown (10YR 4/4) moist; weak medium subangular blocky structure parting to weak fine subangular blocky; soft, very friable, nonsticky and nonplastic; common fine and medium roots; few fine filaments of calcium carbonate; strongly effervescent; mildly alkaline; gradual wavy boundary.
Bk2—22 to 60 inches; very pale brown (10YR 7/3) loamy sand, yellowish brown (10YR 5/4) moist; massive; soft, very friable, nonsticky and nonplastic; common fine filaments and masses of calcium carbonate; strongly effervescent; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 0 to 15 percent gravel
Depth to effervescence: 0 to 10 inches
Depth to paralithic contact: 40 to 60 inches
Hue: 2.5Y or 10YR
Note: In some pedons, the Bk horizons are absent and C horizons are present.

A horizon:
Reaction: mildly alkaline or moderately alkaline

Bk1 horizon:
Texture: loamy sand or loamy fine sand
Reaction: mildly alkaline or moderately alkaline

Bk2 and C horizons:
Texture: loamy sand, loamy fine sand, or sand
Reaction: moderately alkaline or strongly alkaline

Cragnot Series

Map unit(s): 230
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: hills, valleys
Position on landform: backslopes, footslopes
Parent material: alluvium and/or colluvium and/or residuum weathered from limestone
Elevation: 6,300 to 8,500 feet (1,920 to 2,591 meters)
Slope: 6 to 75 percent
Climatic data:
Mean annual precipitation: 12 to 14 inches (305 to 356 millimeters)
Mean annual air temperature: 43 to 45 degrees F. (6.1 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Loamy-skeletal, carbonatic, frigid Haplocalcidic Ustochrepts

Typical Pedon

Map unit in which located: Cragnot-Pensore-Grapit association, 6 to 75 percent slopes, very stony, from the Dinosaur National Monument Soil Survey
Location in the Dinosaur National Monument survey area: about 50 feet east and 1,250 feet north of the southwest corner, section 28, T. 6 N., R. 100 W., NMPM latitude 40 degrees, 26 minutes, 20 seconds N. and longitude 108 degrees, 38 minutes, 39 seconds W.

The soil surface is covered with limestone rock fragments, consisting of 15 percent cobbles and 3 percent stones.

A—0 to 3 inches; dark brown (7.5YR 3/3) very channery loam, dark brown (7.5YR 3/3) moist; weak medium granular structure; slightly hard, friable, slightly sticky and slightly plastic; common fine roots; very few fine vesicular and tubular pores; 10 percent gravel, 30 percent channers, and 10 percent flagstones; calcium carbonate is disseminated; slightly effervescent; slightly alkaline; clear smooth boundary.
Bk1—3 to 12 inches; light brown (7.5YR 6/4) very channery silt loam, brown (7.5YR 5/4) moist; weak fine subangular blocky structure; hard, friable, sticky and plastic; common fine and few medium roots; common fine vesicular and tubular pores; 10 percent gravel, 35 percent channers, and 10 percent flagstones; many distinct calcium carbonate coatings; violently effervescent; 32 percent calcium carbonate equivalent; strongly alkaline; clear wavy boundary.
Bk2—12 to 30 inches; light brown (7.5YR 6/4) extremely channery silt loam, brown (7.5YR 5/4) moist; moderate fine subangular blocky structure; hard, firm, sticky and plastic; few fine and medium roots; common fine vesicular and tubular pores; 15 percent gravel, 40 percent channers, and 15 percent flagstones; many distinct calcium carbonate coatings; violently effervescent; 40 percent calcium carbonate equivalent; strongly alkaline; clear wavy boundary.

Bk3—30 to 38 inches; brown (7.5YR 5/4) extremely channery silt loam, brown (7.5YR 5/4) moist; weak fine subangular blocky structure; hard, friable, slightly sticky and slightly plastic; few fine and medium roots; common fine vesicular and tubular pores; 15 percent gravel, 40 percent channers, and 15 percent flagstones; many distinct calcium carbonate coatings; violently effervescent; 44 percent calcium carbonate equivalent; strongly alkaline; clear wavy boundary.

BCk—38 to 60 inches; strong brown (7.5YR 5/6) very channery silt loam, brown (7.5YR 4/4) moist; massive; hard, firm, sticky and plastic; very few fine roots; few fine vesicular and tubular pores; 10 percent gravel, 20 percent channers, and 7 percent flagstones; few faint calcium carbonate coatings; violently effervescent; 40 percent calcium carbonate equivalent; strongly alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 12 to 30 percent
Rock fragment content: 35 to 70 percent
Calcium carbonate equivalent: 40 to 60 percent

A horizon:
Value: 3 to 5 dry, 3 or 4 moist
Chroma: 2 to 4
Reaction: slightly alkaline or moderately alkaline

Bk horizon:
Value: 5 to 8 dry, 4 to 7 moist
Chroma: 2 to 6
Texture: loam, silt loam, clay loam, or sandy clay loam modified by 35 to 70 percent gravel, cobbles, or channers
Reaction: moderately alkaline or strongly alkaline

BCk horizon: (if present)
Value: 5 to 7 dry, 4 to 6 moist
Chroma: 3 to 6
Texture: sandy loam, silt loam, loam, sandy clay loam, or clay loam modified by 35 to 80 percent gravel, cobbles, channers, stones, or flagstones
Reaction: moderately alkaline or strongly alkaline

Crago Series

Map unit(s): 48, 140
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: hills
Position on landform: summits, backslopes
Parent material: colluvium derived from limestone, residuum derived from basal conglomerate
Elevation: 6,500 to 8,500 feet (1,981 to 2,591 meters)
Slope: 15 to 75 percent
Climatic data:
Mean annual precipitation: 13 to 14 inches (330 to 356 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Loamy-skeletal, carbonatic Borollic Calciorthids

Typical Pedon

Map unit in which located: Ninot-Crago-Garlips complex, 15 to 45 percent slopes
Location in the survey area: about 1,500 feet west and 700 feet south of the northeast corner of sec. 27, T. 5 N., R. 98 W.

A—0 to 4 inches; dark grayish brown (10YR 4/2) very cobbly loam, very dark grayish brown (10YR 3/2) moist; moderate fine granular structure; soft, very friable, sticky and slightly plastic; 35 percent gravel, 25 percent cobbles; strongly effervescent; moderately alkaline; clear wavy boundary.

Bk1—4 to 7 inches; brown (10YR 5/3) very gravelly loam, dark brown (10YR 4/3) moist; moderate fine subangular blocky structure; soft, friable, sticky and slightly plastic; 30 percent gravel, 10 percent cobbles; 40 percent calcium carbonate equivalent; calcium carbonate disseminated; violently effervescent; moderately alkaline; clear wavy boundary.

Bk2—7 to 18 inches; white (10YR 8/2) very gravelly clay loam, very pale brown (10YR 7/3) moist; weak fine subangular blocky structure; soft, friable, sticky and slightly plastic; 30 percent gravel, 10 percent cobbles; 50 percent calcium carbonate equivalent; calcium carbonate disseminated; violently effervescent; moderately alkaline; gradual wavy boundary.

Bk3—18 to 33 inches; pale yellow (2.5Y 8/4) extremely gravelly sandy clay loam, pale yellow (2.5Y 7/4) moist; massive; soft, friable, sticky and slightly plastic; 55 percent gravel, 10 percent cobbles; 45 percent calcium carbonate equivalent; calcium carbonate disseminated; violently effervescent; strongly alkaline; gradual wavy boundary.

Bk4—33 to 60 inches; pale yellow (2.5Y 7/4) extremely gravelly sandy clay loam; light yellowish brown (2.5Y 6/4) moist; massive; soft,

friable, sticky and slightly plastic; 55 percent gravel, 10 percent cobbles; 20 percent calcium carbonate equivalent; calcium carbonate disseminated; violently effervescent; strongly alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 20 to 30 percent
Rock fragment content: 35 to 60 percent
Calcium carbonate equivalent: 40 to 50 percent when measured on the portion, which includes the fine earth fraction and rock fragments less than 3/4 inch in diameter
Note: The Crago soil in the map unit #48 of Crago-Pensore-Grapit association, 6 to 75 percent slopes, is outside the range of the series because it has a hue of 7.5YR in the Bw and Bk horizons. In addition, elevations are higher in more southerly latitudes than allowed in the official series.

Bk1, Bk2, and Bk3 horizons:
Texture: very gravelly and extremely gravelly modifiers of loam, clay loam, or sandy clay loam

Bk4 horizons:
Texture: very gravelly, very channery, very cobbly, or extremely gravelly modifiers of sandy clay loam, sandy loam, or loam

Crestman Series

Map unit(s): 30, 47, 90, 91
Local phase(s): moist
Depth class: shallow
Drainage class: excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Landform: hills, hillslopes, plateaus
Position on landform: summits, backslopes
Parent material: residuum derived from sandstone
Elevation: 6,000 to 7,200 feet (1,829 to 2,195 meters)
Slope: 6 to 50 percent
Climatic data:
Mean annual precipitation: 11 to 14 inches (279 to 356 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Mixed, frigid, shallow Ustic Torripsamments

Typical Pedon

Map unit in which located: Coyet-Crestman, moist, complex, 20 to 50 percent slopes
Location in the survey area: about 1,980 feet south and 660 feet east of the northwest corner of sec. 8, T. 7 N., R. 94 W.

A—0 to 2 inches; light gray (2.5Y 7/2) loamy sand, light yellowish brown (2.5Y 6/4) moist; single grained; loose, nonsticky and nonplastic; common fine and medium roots; 15 percent gravel; strongly effervescent, mildly alkaline; clear wavy boundary.
C—2 to 14 inches; light gray (2.5Y 7/2) gravelly loamy sand, light yellowish brown (2.5Y 6/4) moist; massive; soft, very friable, nonsticky and nonplastic; common fine and medium roots; 15 percent weakly consolidated sandstone fragments, 30 percent gravel; strongly effervescent; moderately alkaline; abrupt wavy boundary.
Cr—14 inches; weakly consolidated sandstone.

Range in Characteristics

Depth to paralithic contact: 10 to 20 inches

C horizon:
Hue: 10YR or 2.5Y
Texture: fine sand, loamy fine sand, or gravelly loamy sand
Rock fragment content: 5 to 30 percent gravel and 10 to 40 percent weakly consolidated sandstone fragments

Crustown Series

Map unit(s): 189
Depth class: shallow
Drainage class: excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Landform: hills
Position on landform: shoulders, backslopes
Parent material: residuum derived from sandstone
Elevation: 5,400 to 6,000 feet (1,646 to 1,829 meters)
Slope: 10 to 40 percent
Climatic data:
Mean annual precipitation: 7 to 10 inches (178 to 254 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Frost-free period: 90 to 105 days

Taxonomic class: Mixed, mesic, shallow Typic Torripsamments

Typical Pedon

Map unit in which located: Tipper-Crustown complex, 10 to 40 percent slopes
Location in the survey area: about 2,500 feet east and 1,500 feet north of the southwest corner of sec. 32, T. 9 N., R. 101 W.

A—0 to 1 inch; white (10YR 8/2) loamy fine sand, brown (10YR 5/3) moist; weak medium platy structure parting to weak thin platy; soft, very friable, nonsticky and nonplastic; strongly effervescent; moderately alkaline; abrupt smooth boundary.
C—1 inch to 10 inches; white (10YR 8/2) fine sand, pale brown (10YR 6/3) moist; massive; soft, very friable, nonsticky and nonplastic; strongly effervescent, moderately alkaline; abrupt wavy boundary.
Cr—10 inches; weakly consolidated sandstone bedrock.

Range in Characteristics

Depth to paralithic contact: 10 to 20 inches

C horizon:
Texture: loamy fine sand or fine sand

Cryoborolls

Map unit(s): 49
Local phase(s): slumped
Depth class: very deep
Drainage class: well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Landform: landslides on mountainsides
Parent material: colluvium derived from interbedded sandstone and shale
Elevation: 7,200 to 8,500 feet (2,194 to 2,591 meters)
Slope: 15 to 50 percent
Climatic data:
Mean annual precipitation: 18 to 20 inches (457 to 508 millimeters)
Mean annual air temperature: 37 to 42 degrees F. (2.8 to 5.6 degrees C.)
Frost-free period: 50 to 75 days

Taxonomic class: Cryoborolls

Typical Pedon

Map unit in which located: Cryoborolls, slumped, 15 to 50 percent slopes
Location in the survey area: 1,500 feet west and 1,700 feet north of the southeast corner of sec. 21, T. 9 N., R. 89 W.

A—0 to 7 inches; dark grayish brown (10YR 4/2) clay loam, very dark grayish brown (10YR 3/2) moist; moderate medium granular structure; slightly hard, friable, sticky and plastic; neutral; abrupt smooth boundary.
Bw—7 to 12 inches; brown (7.5YR 5/4) clay, dark brown (7.5YR 4/4) moist; moderate coarse subangular blocky structure parting to moderate medium subangular blocky; very hard, firm, very sticky and very plastic; neutral; clear smooth boundary.
BC—12 to 31 inches; variegated colors of 70 percent yellowish red (5YR 5/6) and 30 percent brownish yellow (10YR 6/6) clay, yellowish red (5YR 4/6) and yellowish brown (10YR 5/6) moist; weak coarse subangular blocky structure; very hard, firm, very sticky and very plastic; neutral; abrupt smooth boundary.
Ab—31 to 35 inches; very dark grayish brown (10YR 3/2) clay loam, very dark brown (10YR 2/2) moist; moderate medium subangular blocky structure; hard, firm, sticky and plastic; slightly acid; abrupt smooth boundary.
Bwb1—35 to 46 inches; brownish yellow (10YR 6/4) clay loam, yellowish brown (10YR 5/4) moist; moderate coarse subangular blocky structure; very hard, firm, sticky and plastic; slightly acid; gradual smooth boundary.
Bwb2—46 to 60 inches; brownish yellow (10YR 6/4) clay loam, yellowish brown (10YR 5/4) moist; moderate coarse subangular blocky structure; very hard, firm, sticky and plastic; slightly acid; gradual smooth boundary.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 15 to 45 percent
Depth to cambic horizon, if present: 10 to 25 inches
Thickness of the mollic epipedon: 7 to 20 inches
Note: Buried horizons or lithologic discontinuities commonly are present and can occur at any depth.

A horizon:
Texture: sandy loam, sandy clay loam, or clay loam
Reaction: neutral or slightly acid

B horizon:
Hue: 5YR through 10YR
Texture: sandy loam, sandy clay loam, clay loam, or clay
Reaction: moderately acid through neutral

Cushool Series

Map unit(s): 50, 51
Depth class: moderately deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: hillslopes, plateaus
Parent material: residuum derived from sandstone
Elevation: 6,000 to 6,800 feet (1,829 to 2,073 meters)
Slope: 3 to 25 percent
Climatic data:
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine-loamy, mixed Borollic Haplargids

Typical Pedon

Map unit in which located: Cushool fine sandy loam, 3 to 12 percent slopes
Location in the survey area: about 600 feet east and 600 feet south of the northwest corner of sec. 9, T. 6 N., R. 94 W.

A—0 to 5 inches; brown (10YR 5/3) fine sandy loam, dark brown (10YR 3/3) moist; weak coarse platy structure parting to weak thin platy; soft, very friable, nonsticky and nonplastic; mildly alkaline; clear smooth boundary.
Bt—5 to 14 inches; yellowish brown (10YR 5/4) sandy clay loam, brown (10YR 4/3) moist; weak coarse subangular blocky structure parting to moderate medium subangular blocky; slightly hard, very friable, slightly sticky and slightly plastic; very few faint clay films on faces of peds and bridging sand grains; mildly alkaline; clear smooth boundary.
BC—14 to 17 inches; pale brown (10YR 6/3) fine sandy loam, brown (10YR 4/3) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; slightly hard, friable, nonsticky and nonplastic; mildly alkaline; clear smooth boundary.
Bk—17 to 25 inches; very pale brown (10YR 7/3) fine sandy loam, brown (10YR 4/3) moist; massive; soft, very friable, nonsticky and nonplastic; 10 percent gravel; strongly effervescent; moderately alkaline; clear smooth boundary.
Cr—25 inches; soft sandstone.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 0 to 15 percent gravel
Depth to paralithic contact: 20 to 40 inches
Depth to secondary calcium carbonate: 15 to 25 inches

Bt horizon:
Hue: 10YR or 7.5YR

Bk horizon:
Texture: loamy fine sand or fine sandy loam

Danavore Series

Map unit(s): 52
Depth class: moderately deep
Drainage class: well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: mountainsides, narrow ridges
Position on landform: summits
Parent material: residuum derived from interbedded sandstone and shale
Elevation: 7,200 to 8,600 feet (2,194 to 2,621 meters)
Slope: 5 to 30 percent
Climatic data:
Mean annual precipitation: 18 to 20 inches (457 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Frost-free period: 50 to 75 days

Taxonomic class: Loamy-skeletal, mixed (calcareous) Typic Cryorthents

Typical Pedon

Map unit in which located: Danavore-Waybe complex, 5 to 30 percent slopes
Location in the survey area: about 1,400 feet west and 1,200 feet south of the northeast corner of sec. 17, T. 4 N., R. 94 W.

A—0 to 4 inches; light yellowish brown (10YR 6/4) very cobbly sandy loam, dark yellowish brown (10YR 4/4) moist; weak fine granular structure; soft, very friable, nonsticky and nonplastic; many fine and medium roots; 20 percent gravel, 30 percent cobbles, 10 percent stones; neutral; abrupt smooth boundary.
AC—4 to 8 inches; light yellowish brown (10YR 6/4) extremely stony sandy loam, dark yellowish

brown (10YR 4/4) moist; weak fine granular structure; soft, very friable, nonsticky and nonplastic; common medium and coarse roots; 15 percent gravel, 20 percent cobbles, 40 percent stones; neutral; abrupt smooth boundary.

2C1—8 to 17 inches; light yellowish brown (10YR 6/4) extremely channery loam, yellowish brown (10YR 5/4) moist; massive; soft, friable, sticky and plastic; common medium and coarse roots; 70 percent channers; neutral; gradual smooth boundary.

2C2—17 to 22 inches; very pale brown (10YR 7/3) extremely channery clay loam, yellowish brown (10YR 5/4) moist; massive; soft, friable, sticky and plastic; few medium and coarse roots; 70 percent channers; calcium carbonate pendants on rock fragments; slightly effervescent; moderately alkaline; gradual wavy boundary.

2Cr—22 inches; soft sandstone.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 35 to 75 percent
Depth to effervescence: 0 to 20 inches
Depth to paralithic contact: 20 to 40 inches

2C horizon:
Texture: extremely channery loam, very channery loam, very channery clay loam, or extremely channery clay loam

Davtone Series

Map unit(s): 53
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: concave and planar positions on mountainsides
Parent material: alluvium and colluvium derived from sandstone
Elevation: 7,000 to 9,000 feet (2,134 to 2,743 meters)
Slope: 12 to 35 percent
Climatic data:
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Frost-free period: 50 to 75 days

Taxonomic class: Fine-loamy, mixed Argic Pachic Cryoborolls

Typical Pedon

Map unit in which located: Davtone-Forsey complex, 12 to 35 percent slopes, very stony
Location in the survey area: about 2,200 feet east and 1,000 feet north of the southwest corner of sec. 24, T. 12 N., R. 104 W.

A1—0 to 2 inches; dark brown (7.5YR 3/2) loam, very dark brown (7.5YR 2/2) moist; weak medium granular structure; soft, very friable, slightly sticky and slightly plastic; neutral; abrupt smooth boundary.

A2—2 to 6 inches; dark brown (7.5YR 4/2) loam, dark brown (7.5YR 3/2) moist; weak medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; neutral; abrupt smooth boundary.

BAt—6 to 17 inches; brown (7.5YR 5/3) clay loam, dark brown (7.5YR 3/3) moist; moderate medium subangular blocky structure; slightly hard, friable, sticky and plastic; common distinct clay films on faces of peds; neutral; clear wavy boundary.

Bt—17 to 30 inches; reddish brown (5YR 5/4) clay loam, reddish brown (5YR 4/4) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; hard, firm, sticky and plastic; common distinct clay films on faces of peds; 10 percent pebbles; neutral; gradual smooth boundary.

BC—30 to 60 inches; reddish brown (5YR 5/4) cobbly loam, reddish brown (5YR 4/4) moist; weak medium subangular blocky structure; slightly hard, friable, sticky and plastic; 10 percent pebbles, 10 percent cobbles; mildly alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 10 to 30 percent
Thickness of the mollic epipedon: 16 to 20 inches

A horizon:
Hue: 7.5YR or 5YR
Rock fragment content: 0 to 20 percent

Bt horizon:
Hue: 5YR or 2.5YR
Texture: clay loam or gravelly clay loam

Deaver Series

Map unit(s): 54, 55
Depth class: moderately deep
Drainage class: well drained

Slowest permeability: .06 to 0.2 in./hr. (slow)
Landform: hills, hillslopes
Position on landform: backslopes, footslopes
Parent material: residuum derived from shale
Elevation: 5,400 to 6,100 feet (1,646 to 1,859 meters)
Slope: 3 to 45 percent
Climatic data:
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Frost-free period: 90 to 105 days

Taxonomic class: Fine, montmorillonitic (calcareous), mesic Typic Torriorthents

Typical Pedon

Map unit in which located: Deaver-Chipeta complex, 3 to 35 percent slopes
Location in the survey area: about 2,000 east and 1,300 feet south of the northwest corner of sec. 31, T. 4 N., R. 99 W.

A—0 to 2 inches; pale yellow (2.5Y 7/4) silty clay loam, light yellowish brown (2.5Y 6/4) moist; moderate thin platy structure parting to moderate fine granular; soft, very friable, very sticky and very plastic; strongly effervescent; moderately alkaline; abrupt smooth boundary.
AC—2 to 8 inches; light yellowish brown (2.5Y 6/4) silty clay, light olive brown (2.5Y 5/4) moist; weak fine subangular blocky structure; hard, firm, very sticky and very plastic; strongly effervescent; moderately alkaline; clear smooth boundary.
C1—8 to 18 inches; light yellowish brown (2.5Y 6/4) silty clay, light olive brown (2.5Y 5/4) moist; weak coarse subangular blocky structure; hard, firm, very sticky and very plastic; common fine clusters of gypsum crystals; strongly effervescent; moderately alkaline; clear smooth boundary.
C2—18 to 35 inches; light yellowish brown (2.5Y 6/4) silty clay, light olive brown (2.5Y 5/4) moist; 70 percent massive and 30 percent platy rock structure; hard, firm, very sticky and very plastic; 10 percent shale fragments; common clusters of gypsum crystals; strongly effervescent; moderately alkaline; gradual smooth boundary.
Cr—35 inches; weakly consolidated shale bedrock.

Range in Characteristics

Depth to paralithic contact: 20 to 40 inches
Hue: 10YR through 5Y

C horizon:
Texture: clay or silty clay
Reaction: moderately alkaline or strongly alkaline

Debone Series

Map unit(s): 56
Depth class: very deep
Drainage class: well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Landform: stream terraces
Parent material: alluvium derived from shale and sandstone
Elevation: 5,700 to 6,400 feet (1,737 to 1,951 meters)
Slope: 0 to 3 percent
Climatic data:
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine, montmorillonitic, frigid Typic Natrargids

Typical Pedon

Map unit in which located: Debone loam, 0 to 3 percent slopes
Location in the survey area: about 1,500 feet west and 400 feet south of northeast corner of sec. 13, T. 9 N., R. 99 W.

E—0 to 3 inches, light gray (10YR 7/2) loam, grayish brown (10YR 5/3) moist; moderate fine and medium platy structure; soft, very friable, slightly sticky and nonplastic; many fine vesicular pores; strongly effervescent; strongly alkaline; abrupt smooth boundary.
Btn1—3 to 6 inches; light yellowish brown (2.5Y 6/4) clay loam, light olive brown (2.5Y 5/4) moist; strong medium columnar structure parting to moderate medium angular blocky; very hard, firm, very sticky and very plastic; common prominent brown (7.5YR 5/4) clay films on faces of peds; violently effervescent; very strongly alkaline; abrupt smooth boundary.
Btn2—6 to 11 inches; light gray (2.5Y 7/2) clay, light yellowish brown (2.5Y 6/4) moist; strong medium columnar structure parting to moderate medium subangular blocky; very hard, firm, very sticky and very plastic; common distinct clay films on faces of peds; violently effervescent; very strongly alkaline; clear wavy boundary.
Btkn—11 to 14 inches; light gray (2.5Y 7/2) clay, olive (5Y 5/3) moist; weak medium columnar structure parting to weak medium subangular blocky, hard, friable, very sticky and very plastic; common distinct clay films on faces of peds; violently effervescent; very strongly alkaline; clear wavy boundary.

Bkn1—14 to 25 inches; light gray (2.5Y 7/2) clay loam, olive (5Y 5/3) moist; weak medium platy structure; slightly hard, friable, sticky and plastic; violently effervescent; very strongly alkaline; gradual wavy boundary.
Bkn2—25 to 35 inches; pale yellow (2.5Y 7/4) clay loam, light olive brown (2.5Y 5/4) moist; weak medium platy structure; hard, firm, sticky and plastic; violently effervescent; very strongly alkaline; clear smooth boundary.
2C—35 to 60 inches; light gray (2.5Y 7/2) fine sandy loam, olive gray (5Y 5/2) moist; massive; soft, very friable, slightly sticky and nonplastic; weak fine stratification; violently effervescent; strongly alkaline.

Range in Characteristics

Btn horizon:
Hue: 5Y through 7.5YR
Note: The depth to the base of the Bt horizons is 10 to 24 inches.

Bkn horizon:
Hue: 5Y through 10YR
Texture: clay loam, loam, or sandy clay loam

2C horizon:
Hue: 10YR through 5Y
Texture: fine sandy loam or sandy loam

Degater Series

Map unit(s): 7, 146
Depth class: moderately deep
Drainage class: well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Landform: hills, hillslopes
Position on landform: backslopes
Parent material: colluvium and residuum derived from shale, residuum derived from shale
Elevation: 5,700 to 6,200 feet (1,737 to 1,890 meters)
Slope: 3 to 30 percent
Climatic data:
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Frost-free period: 90 to 105 days

Taxonomic class: Fine, montmorillonitic, mesic Typic Camborthids

Typical Pedon

Map unit in which located: Pavillion-Degater complex, 3 to 20 percent slopes
Location in the survey area: about 2,600 feet east and 1,500 feet north of the southwest corner of sec. 36, T. 5 N., R. 99 W.

A—0 to 3 inches; light gray (2.5Y 7/2) very gravelly silty clay, light olive brown (2.5Y 5/4) moist; weak thin platy structure parting to weak fine granular; soft, friable, very sticky and very plastic; 50 percent gravel; strongly effervescent; moderately alkaline; abrupt smooth boundary.
Bw1—3 to 9 inches; light yellowish brown (2.5Y 6/4) silty clay, light olive brown (2.5Y 5/4) moist; moderate very fine angular blocky structure; slightly hard, friable, very sticky and very plastic; 10 percent gravel; strongly effervescent; moderately alkaline; abrupt wavy boundary.
Bw2—9 to 12 inches; light yellowish brown (2.5Y 6/4) silty clay, light olive brown (2.5Y 5/4) moist; moderate medium prismatic structure parting to moderate fine subangular blocky; hard, firm, very sticky and very plastic; 5 percent gravel; strongly effervescent; strongly alkaline; clear wavy boundary.
Bk1—12 to 22 inches; light brownish gray (2.5Y 6/2) clay, grayish brown (2.5Y 5/2) moist; weak medium prismatic structure; hard, firm, very sticky and very plastic; 14 percent calcium carbonate equivalent; violently effervescent; strongly alkaline; clear wavy boundary.
Bk2—22 to 30 inches; light brownish gray (2.5Y 6/2) clay, light yellowish brown (2.5Y 6/4) moist; weak medium prismatic structure; very hard, very firm, very sticky and very plastic; 40 percent soft shale fragments; 6 percent calcium carbonate equivalent; violently effervescent; strongly alkaline; clear wavy boundary.
Cr—30 to 60 inches; pale olive and gray weakly consolidated gypsiferous shale bedrock.

Range in Characteristics

Depth to paralithic contact: 20 to 40 inches
Depth to secondary calcium carbonate: 10 to 20 inches
Hue: 10YR to 5Y

Bw horizons:
Texture: silty clay or clay
Rock fragment content: 0 to 15 percent gravel
Reaction: moderately alkaline or strongly alkaline

Bk horizons:
Texture: silty clay loam, clay loam, silty clay, or clay
Rock fragment content: 0 to 60 percent soft shale fragments
Reaction: moderately alkaline or strongly alkaline

Denco Series

Map unit(s): 259
Depth class: moderately deep
Drainage class: well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Landform: hills
Parent material: slope alluvium over residuum derived from shale
Elevation: 5,400 to 5,800 feet (1,646 to 1,768 meters)
Slope: 4 to 25 percent
Climatic data:
Mean annual precipitation: 5 to 12 inches (127 to 305 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Frost-free period: 110 to 140 days

Taxonomic class: Fine, smectitic, mesic Leptic Haplotorrerts

Typical Pedon

Map unit in which located: Denco-Gerst complex, 4 to 40 percent slopes, from the Uintah Area, Utah Soil Survey
Location in the Uintah Area, Utah survey area: about 4 1/2 miles northeast of Red Wash; about 1,050 feet north and 1,450 feet west of the southeast corner of sec. 4, T. 7 S., R. 24 E., SLBM; Dinosaur N.W., Utah USGS quadrangle; latitude 40 degrees, 13 minutes, 03 seconds north and longitude 109 degrees, 12 minutes, 49 seconds west; NAD 27.

A—0 to 4 inches; reddish brown (5YR 5/4) silty clay loam, red (2.5YR 4/6) moist; weak medium platy structure parting to moderate very fine subangular blocky; slightly hard, friable, very sticky and very plastic; few medium and fine, common very fine roots; common medium and very fine vesicular pores; 1 centimeter wide cracks predominantly are filled with loose soil; slightly effervescent; calcium carbonate is disseminated; moderately alkaline (pH 8.4); clear smooth boundary.
Bssy1—4 to 11 inches; reddish brown (5YR 5/4) silty clay, red (2.5YR 4/6) moist; moderate very coarse prismatic structure parting to moderate medium and fine subangular blocky; very hard, very firm, very sticky and very plastic; few fine, common very fine roots; common fine and very fine tubular pores; few nonintersecting slickensides and pressure faces; 1 centimeter wide cracks extending vertically through the horizon; few very fine gypsum masses; slightly effervescent; calcium carbonate is disseminated; moderately alkaline (pH 8.4); clear smooth boundary.
Bssy2—11 to 29 inches; reddish brown (5YR 5/4) silty clay, red (2.5YR 4/6) moist; moderate very coarse prismatic structure parting to weak medium and coarse subangular blocky; very hard, very firm, very sticky and very plastic; few fine and very fine roots; few fine and very fine tubular pores; common nonintersecting slickensides and pressure faces; 1 centimeter wide vertical cracks in upper part of horizon; few very fine gypsum masses; slightly effervescent; calcium carbonate is disseminated; moderately alkaline (pH 8.4); gradual wavy boundary.
CBy—29 to 37 inches; reddish brown (5YR 5/4) silty clay, yellowish red (5YR 4/6) moist; massive, residual thin and moderately thick bedded rock structure; very hard, very firm, very sticky and very plastic; few very fine roots; common very fine and fine interstitial pores; few fine gypsum veins and crystals; slightly effervescent; calcium carbonate is disseminated; moderately alkaline (pH 8.2); gradual wavy boundary.
Cr—37 inches; weathered shale bedrock.

Range in Characteristics

Particle-size control section:
Clay content: 35 to 50 percent
Depth to paralithic contact: 20 to 40 inches to weathered shale
Mean annual soil temperature: 47 to 51 degrees F.
Moisture control section: is affected by precipitation that falls evenly throughout the year with a slight increase in late summer and early fall. In the higher precipitation zones, part of the precipitation is lost to runoff and evaporation.
Moisture regime: typic aridic
Vertic features: vertical cracks, 1 to 1 1/2 centimeters wide, extend from the surface to a depth of 20 to 25 inches; few to common slickensides and pressure faces

A horizon:
Hue: 2.5YR to 7.5YR
Value: 4 to 6 dry, 3 to 5 moist
Chroma: 4 to 6 dry or moist
Texture: silty clay loam
Calcium carbonate equivalent: 3 to 15 percent
Electrical conductivity (mmhos/cm): 0 to 16
Sodium absorption ratio: 0 to 20
Reaction: moderately alkaline to very strongly alkaline

Bssy and CBy horizons:
Hue: 2.5YR to 7.5YR

Value: 4 to 7 dry, 4 or 5 moist
Chroma: 2 to 6 dry or moist
Texture: silty clay, clay, silty clay loam, or clay loam
Calcium carbonate equivalent: 3 to 15 percent
Electrical conductivity (mmhos/cm): 0 to 8
Sodium absorption ratio: 0 to 10
Gypsum: 1 to 5 percent
Reaction: moderately alkaline or strongly alkaline

Detra Series

Map unit(s): 57, 102
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: alluvial fans, hills, valley floors
Position on landform: toeslopes
Parent material: alluvium derived from limestone and sandstone, alluvium derived from sandstone
Elevation: 6,800 to 8,200 feet (2,073 to 2,499 meters)
Slope: 1 to 12 percent
Climatic data:
Mean annual precipitation: 15 to 17 inches (381 to 432 millimeters)
Mean annual air temperature: 40 to 45 degrees F. (4.4 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine-loamy, mixed Pachic Argiborolls

Typical Pedon

Map unit in which located: Detra-Cortyzack complex, 1 to 12 percent slopes
Location in the survey area: about 2,600 feet south and 1,450 feet east of the northwest corner of sec. 4, T. 7 N., R. 101 W.

A1—0 to 8 inches; brown (7.5YR 4/2) fine sandy loam, dark brown (7.5YR 3/2) moist; weak medium granular structure; soft, very friable, slightly sticky and slightly plastic; neutral; abrupt smooth boundary.
A2—8 to 19 inches; reddish brown (5YR 4/3) fine sandy loam, dark reddish brown (5YR 3/3) moist; weak medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; neutral; clear smooth boundary.
Bt1—19 to 27 inches; reddish brown (5YR 4/4) sandy clay loam, dark reddish brown (5YR 3/3) moist; moderate medium subangular blocky structure; slightly hard, very friable, sticky and slightly plastic; common distinct clay films on faces of peds; neutral; clear smooth boundary.
Bt2—27 to 38 inches; reddish brown (5YR 4/4) sandy clay loam, dark reddish brown (5YR 3/4) moist; moderate medium subangular blocky structure; slightly hard, friable, sticky and slightly plastic; common distinct clay films on faces of peds; neutral; clear smooth boundary.
Bt3—38 to 50 inches; reddish brown (5YR 5/4) sandy clay loam, reddish brown (5YR 4/4) moist; moderate medium subangular blocky structure; slightly hard, very friable, sticky and slightly plastic; common distinct clay films on faces of peds and along interstital pores; neutral; clear smooth boundary.
Bk—50 to 60 inches; pink (5YR 7/3) sandy clay loam, reddish brown (5YR 5/4) moist; massive; soft, very friable, slightly sticky and slightly plastic; strongly effervescent; moderately alkaline.

Range in Characteristics

Depth to argillic horizon: 40 to 50 inches
Depth to secondary calcium carbonate: 40 or more inches
Hue: 5YR or 7.5YR
Thickness of the mollic epipedon: 16 to 27 inches
Note: The Detra soil in the map unit #102 of Holter-Detra complex, 3 to 25 percent slopes, extremely stony is outside the range of the Detra series because it is effervescent at a depth of 25 inches and contains 50 percent rock fragments in the Bk horizon at a depth of 36 inches. The texture of the Bk horizons in this soil is very gravelly sandy clay loam or very cobbly sandy clay loam with the content of rock fragments ranging from 35 to 50 percent; the texture of the Bt horizon is clay loam or sandy clay loam. The depth to the loamy-skeletal horizons ranges from 25 to 35 inches.

Bk horizon:
Texture: sandy clay loam or sandy loam
Reaction: mildly alkaline or moderately alkaline

Diaflats Series

Map unit(s): 58
Depth class: moderately deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: planar and concave slopes on dissected plateaus
Parent material: residuum derived from fine grained sandstone and siltstone
Elevation: 6,600 to 7,200 feet (2,012 to 2,195 meters)
Slope: 2 to 15 percent

Climatic data:
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine-loamy, mixed (calcareous), frigid Typic Torriorthents

Typical Pedon

Map unit in which located: Diaflats-Fondillas complex, 2 to 15 percent slopes
Location in the survey area: about 2,000 feet north and 900 feet west of the southeast corner of sec. 35, T. 12 N., R. 101 W.

A—0 to 2 inches; pale brown (10YR 6/3) loam, brown (10YR 4/3) moist; weak fine granular structure; soft, very friable, slightly sticky and nonplastic; strongly effervescent; moderately alkaline; abrupt smooth boundary.
AB—2 to 8 inches; light yellowish brown (10YR 6/4) loam, yellowish brown (10YR 5/6) moist; weak fine subangular blocky structure; soft, friable, sticky and plastic; strongly effervescent; moderately alkaline; gradual wavy boundary.
Bk1—8 to 15 inches; pale yellow (2.5Y 7/4) loam, light yellowish brown (2.5Y 6/4) moist; massive; soft, friable, sticky and plastic; few fine filaments of calcium carbonate; strongly effervescent; moderately alkaline, diffuse wavy boundary.
Bk2—15 to 26 inches; pale yellow (2.5Y 7/4) silt loam, light yellowish brown (2.5Y 6/4) moist; massive; soft, friable, sticky and plastic; few fine filaments of calcium carbonate; violently effervescent; moderately alkaline; abrupt smooth boundary.
R—26 inches; hard fractured sandstone.

Range in Characteristics

Particle-size control section:
Rock fragment content: 0 to 15 percent
Depth to effervescence: 0 to 2 inches
Depth to lithic contact: 20 to 40 inches
Hue: 2.5Y or 10YR
Note: In some pedons, horizons with textures of sandy loam or sandy clay loam occur at variable depths and with variable thicknesses.

Bk horizon:
Texture: silt loam, loam, or channery loam
Reaction: moderately alkaline or strongly alkaline

Diagulch Series

Map unit(s): 256
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: hills
Position on landform: shoulders
Parent material: eolian deposits over slope alluvium derived from limestone and quartzite
Elevation: 7,300 to 7,700 feet (2,225 to 2,347 meters)
Slope: 3 to 15 percent
Climatic data:
Mean annual precipitation: 16 to 22 inches (406 to 559 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Frost-free period: 70 to 90 days

Taxonomic class: Fine-loamy, mixed, superactive, frigid Typic Haplustolls

Typical Pedon

Map unit in which located: Cortyzack-Diagulch complex, 3 to 25 percent slopes, from the Uintah Area, Utah Soil Survey
Location in the Uintah Area, Utah survey area: about 25 miles northeast of Vernal; about 200 feet west and 2,100 feet south of the northeast corner of sec. 12, T. 2 S., R. 23 E., SLBM; Blair Basin, Utah USGS quadrangle; latitude 40 degrees, 39 minutes, 47 seconds north and longitude 109 degrees, 16 minutes, 33 seconds west; NAD 27.

A1—0 to 4 inches; dark brown (7.5YR 4/2) loam, very dark brown (7.5YR 2/2) moist; weak medium prismatic structure parting to moderate fine and very fine granular; soft, friable, slightly sticky and slightly plastic; many very fine, common fine, and few medium and coarse roots; common very fine and fine tubular pores; neutral (pH 7.2); clear smooth boundary.
A2—4 to 9 inches; brown (7.5YR 4/4) loam, dark brown (7.5YR 3/2) moist; moderate medium and fine subangular blocky structure parting to moderate fine and very fine granular; slightly hard, friable, moderately sticky and moderately plastic; many very fine and fine and few medium and coarse roots; common very fine and fine tubular pores; slightly alkaline (pH 7.4); abrupt smooth boundary.

Bk1—9 to 14 inches; light brown (7.5YR 6/4) loam, brown (7.5YR 5/4) moist; moderate fine and very fine subangular blocky structure; hard, firm, moderately sticky and moderately plastic; many very fine, common fine, and few medium roots; many very fine, common fine, and few medium tubular pores; strongly effervescent; 26 percent calcium carbonate equivalent; calcium carbonate is disseminated and segregated as common fine irregularly shaped masses; moderately alkaline (pH 8.0); clear wavy boundary.

Bk2—14 to 22 inches; pink (5YR 7/4) loam, light brown (7.5YR 6/4) moist; massive; very hard, firm, moderately sticky and moderately plastic; common very fine and few fine and medium roots; many very fine and common fine tubular pores; strongly effervescent; 35 percent calcium carbonate equivalent; calcium carbonate is disseminated and segregated as many fine and medium irregularly shaped masses; moderately alkaline (pH 8.0); clear irregular boundary.

Bk3—22 to 34 inches; pink (5YR 7/4) loam, red (2.5YR 5/6) moist; massive; very hard, firm, moderately sticky and moderately plastic; few very fine, fine and medium roots; common very fine and fine tubular pores; strongly effervescent; 27 percent calcium carbonate equivalent; calcium carbonate is disseminated and segregated as common fine irregularly shaped masses; moderately alkaline (pH 8.0); abrupt smooth boundary.

C1—34 to 53 inches; light reddish brown (5YR 6/4) sandy loam, dark red (2.5YR 3/6) moist; massive; hard, friable, slightly sticky and slightly plastic; few very fine and fine roots; common very fine and fine tubular pores; 5 percent gravel; strongly effervescent; 10 percent calcium carbonate equivalent; calcium carbonate is disseminated; moderately alkaline (pH 8.0); abrupt wavy boundary.

C2—53 to 60 inches; light reddish brown (5YR 6/4) gravelly loamy sand, dark red (2.5YR 3/6) moist; massive; very hard, very friable, slightly sticky and nonplastic; 5 percent cobbles and 15 percent gravel; slightly effervescent; 9 percent calcium carbonate equivalent; calcium carbonate is disseminated; moderately alkaline (pH 8.0).

Range in Characteristics

Particle-size control section:
- *Clay content:* 18 to 27 percent
- *Rock fragment content:* 0 to 15 percent, of limestone and quartzite origin

Depth to calcic horizon: 7 to 15 inches

Mean annual soil temperature: 42 to 45 degrees F.

Moisture control section: is affected by precipitation that falls evenly throughout the year with a slight increase in late summer and early fall

Moisture regime: typic ustic

Thickness of the mollic epipedon: 7 to 9 inches

A horizon:
- *Hue:* 5YR or 7.5YR
- *Value:* 4 dry, 2 or 3 moist
- *Chroma:* 2 to 4 dry and moist
- *Texture:* loam
- *Reaction:* neutral to moderately alkaline

Bk horizons:
- *Hue:* 2.5YR to 7.5YR
- *Value:* 6 or 7 dry, 5 to 7 moist
- *Chroma:* 2 to 6 dry or moist
- *Texture:* loam, clay loam, sandy loam, or gravelly sandy loam
- *Rock fragment content:* 0 to 35 percent
- *Calcium carbonate equivalent:* 15 to 30 percent
- *Reaction:* moderately alkaline

C horizon:
- *Hue:* 2.5YR or 5YR
- *Value:* 6 dry, 3 to 6 moist
- *Chroma:* 4 to 6 dry or moist
- *Texture:* gravelly loamy sand and sandy loam
- *Rock fragment content:* 0 to 35 percent
- *Calcium carbonate equivalent:* 5 to 20 percent
- *Reaction:* moderately alkaline

Dinnen Series

Map unit(s): 220

Depth class: very deep

Drainage class: well drained

Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)

Landform: plateaus

Parent material: eolian deposits and alluvium derived from sandstone

Elevation: 7,500 to 8,500 feet (2,286 to 2,591 meters)

Slope: 3 to 12 percent

Climatic data:
- *Mean annual precipitation:* 16 to 18 inches (406 to 457 millimeters)
- *Mean annual air temperature:* 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
- *Frost-free period:* 50 to 75 days

Taxonomic class: Coarse-loamy, mixed Typic Cryoborolls

Typical Pedon

Map unit in which located: Youga-Dinnen complex, 3 to 12 percent slopes
Location in the survey area: in the southeast 1/4 of the northwest 1/4 of sec. 2, T. 11 N., R. 103 W.

A1—0 to 3 inches; dark grayish brown (10YR 4/2) fine sandy loam, very dark grayish brown (10YR 3/2) moist; weak fine granular structure; soft, very friable, nonsticky and nonplastic; neutral; clear wavy boundary.
A2—3 to 10 inches; dark grayish brown (10YR 4/2) fine sandy loam, dark brown (10YR 3/3) moist; moderate medium granular structure; slightly hard, friable, nonsticky and nonplastic; neutral; clear wavy boundary.
AC—10 to 20 inches; brown (7.5YR 5/4) fine sandy loam, dark brown (7.5YR 4/3) moist; weak coarse subangular blocky structure parting to moderate medium subangular blocky; slightly hard, friable, nonsticky and nonplastic; neutral; clear wavy boundary.
C1—20 to 41 inches; light brown (7.5YR 6/4) gravelly fine sandy loam, brown (7.5YR 4/4) moist; weak medium subangular blocky structure; slightly hard, friable, nonsticky and nonplastic; 20 percent fine gravel; neutral; clear wavy boundary.
C2—41 to 60 inches; pink (7.5YR 7/4) fine sandy loam, brown (7.5YR 5/4) moist; massive; slightly hard, friable, nonsticky and nonplastic; 5 percent gravel; mildly alkaline.

Range in Characteristics

Particle-size control section:
Clay content: 5 to 25 percent
Hue: 7.5YR or 10YR
Thickness of the mollic epipedon: 10 to 14 inches

C horizons:
Texture: gravelly fine sandy loam or fine sandy loam

Dokie Series

Map unit(s): 252, 260, 261
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: mountain slopes
Parent material: slope alluvium and colluvium derived from sandstone and quartzite
Elevation: 7,600 to 9,000 feet (2,316 to 2,743 meters)
Slope: 25 to 70 percent
Climatic data:
Mean annual precipitation: 22 to 28 inches (559 to 711 millimeters)
Mean annual air temperature: 38 to 42 degrees F. (3.3 to 5.6 degrees C.)
Frost-free period: 50 to 70 days

Taxonomic class: Loamy-skeletal, siliceous, superactive Ustollic Haplocryalfs

Typical Pedon

Map unit in which located: Dokie-Namlot association, 15 to 70 percent slopes, from the Uintah Area, Utah Soil Survey
Location in the Uintah Area, Utah survey area: about 1/4 mile northeast of Warren Peak on Diamond Mountain; about 1,000 feet west and 1,900 feet south of the northeast corner of sec. 18, T. 1 S., R. 24 E.; Blair Basin, Utah USGS quadrangle; latitude 40 degrees, 44 minutes, 13 seconds north and longitude 109 degrees, 15 minutes, 37 seconds west; NAD 27.

The soil surface is covered by 40 percent boulders, 20 percent stones, and 5 percent cobbles.

Oi—0 to 4 inches; forest litter of needles, twigs, leaves, and cones; slightly decomposed just above the soil surface; abrupt smooth boundary.
A—4 to 7 inches; dark brown (7.5YR 4/2) extremely bouldery loam, black (5YR 3/1) moist; moderate very fine granular structure; soft, very friable, slightly sticky and slightly plastic; few coarse, medium, fine and very fine roots; few medium and common fine and very fine tubular pores; 20 percent boulders, 10 percent stones, 10 percent cobbles, and 10 percent gravel; neutral (pH 7.2); abrupt smooth boundary.
E—7 to 16 inches; light reddish brown (5YR 6/3) extremely bouldery loam, dark reddish brown (5YR 3/3) moist; moderate thin platy structure parting to moderate very fine subangular blocky; slightly hard, very friable, slightly sticky and slightly plastic; common fine and very fine, few coarse and medium roots; common fine and very fine and few medium tubular pores; 20 percent boulders, 20 percent stones, 10 percent cobbles, and 10 percent gravel; this horizon tongues 3 to 6 inches into the horizon below; neutral (pH 7.2); abrupt wavy boundary.
Bt1—16 to 36 inches; reddish brown (5YR 5/3) extremely bouldery loam, reddish brown (5YR 4/3) moist; moderate medium subangular blocky structure parting to moderate fine and very fine

subangular blocky; hard, firm, moderately sticky and moderately plastic; many very fine, common medium and fine, and few coarse roots; many very fine, common fine, and few medium tubular pores; few distinct clay films on faces of peds and rock fragments; 20 percent boulders, 25 percent stones, 20 percent cobbles, and 10 percent gravel; neutral (pH 6.9); gradual wavy boundary.

Bt2—36 to 64 inches; reddish brown (2.5YR 5/4) extremely bouldery sandy loam, reddish brown (2.5YR 4/3) moist; weak medium subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; common fine and very fine and few medium roots; common fine and very fine tubular pores; few faint clay films on faces of peds and rock fragments; 15 percent boulders, 15 percent stones, 10 percent cobbles, and 25 percent gravel; neutral (pH 6.9).

Range in Characteristics

Particle-size control section:
- *Clay content:* 18 to 27 percent clay
- *Rock fragment content:* 60 to 80 percent, predominantly stones of sandstone and quartzite lithology

Hue: color values of 3 or less moist and 5 or less dry, after mixing the top 18 cm (7 inches)

Mean annual soil temperature: 24 to 30 degrees F.

Moisture control section: is affected by precipitation that falls evenly throughout the year with a slight increase in the late summer and early fall

Moisture regime: udic bordering on ustic

A horizon:
- *Hue:* 7.5YR or 5YR
- *Value:* 3 to 5 dry, 3 moist
- *Chroma:* 1 or 2 dry or moist
- *Texture:* extremely bouldery loam or extremely stony loam
- *Rock fragment content:* 60 to 80 percent
- *Reaction:* neutral

E horizon:
- *Hue:* 10R to 5YR
- *Value:* 6 dry, 3 or 4 moist
- *Chroma:* 3 to 5 dry or moist
- *Texture:* extremely bouldery loam
- *Rock fragment content:* 60 to 80 percent
- *Reaction:* neutral

Bt horizon:
- *Hue:* 10R to 5YR
- *Value:* 4 or 5 dry, 3 or 4 moist
- *Chroma:* 3 to 6 dry or moist
- *Texture:* extremely bouldery loam, extremely bouldery sandy loam, or extremely stony sandy clay loam
- *Rock fragment content:* 60 to 80 percent
- *Reaction:* neutral

Dranyon Series

Map unit(s): 59
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: mountainsides
Parent material: colluvium derived from basalt and sandstone
Elevation: 7,800 to 8,600 feet (2,377 to 2,621 meters)
Slope: 3 to 20 percent
Climatic data:
- *Mean annual precipitation:* 20 to 22 inches (508 to 559 millimeters)
- *Mean annual air temperature:* 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
- *Frost-free period:* 50 to 75 days

Taxonomic class: Fine-loamy, mixed Argic Pachic Cryoborolls

Typical Pedon

Map unit in which located: Dranyon loam, 3 to 20 percent slopes

Location in the survey area: about 500 feet north and 50 feet east of the southwest corner of sec. 36, T. 11 N., R. 89 W.

Oi—0 to 2 inches; slightly decomposed leaves and twigs.

A1—2 to 8 inches; very dark grayish brown (10YR 3/2) loam, very dark brown (10YR 2/2) moist; strong medium and coarse granular structure; soft, very friable, slightly sticky and slightly plastic; slightly acid; gradual wavy boundary.

A2—8 to 19 inches; dark grayish brown (10YR 4/2) loam, very dark brown (10YR 2/2) moist; moderate fine granular structure; soft, very friable, slightly sticky and slightly plastic; 5 percent gravel; slightly acid; abrupt smooth boundary.

Bt1—19 to 34 inches; yellowish brown (10YR 5/4) gravelly sandy clay loam, dark yellowish brown (10YR 4/4) moist; strong medium prismatic structure parting to moderate coarse subangular blocky; hard, friable, sticky and plastic; few faint clay films on faces of peds; 5 percent gravel, 10 percent cobbles; neutral; gradual wavy boundary.

Bt2—34 to 60 inches; light yellowish brown (10YR 6/4) gravelly sandy clay loam, yellowish brown (10YR 5/4) moist; moderate medium prismatic structure; hard, friable, sticky and plastic; few faint clay films on faces of peds; 15 percent gravel, 5 percent cobbles; moderately acid.

Range in Characteristics

Depth to argillic horizon: 40 to 60 inches
Thickness of the mollic epipedon: 16 to 23 inches

Bt horizon:
Hue: 7.5YR or 10YR
Rock fragment content: 15 to 35 percent
Texture: gravelly sandy clay loam or gravelly clay loam
Reaction: moderately acid to neutral

BC horizon: (when present)
Hue: 7.5YR or 10YR
Rock fragment content: 15 to 35 percent
Reaction: moderately acid or slightly acid

Duffymont Series

Map unit(s): 127, 155, 194, 246, 257
Depth class: very shallow to shallow
Drainage class: somewhat excessively drained, well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: hills, mountain slopes, mountainsides, plateaus
Position on landform: summits, shoulders
Parent material: residuum derived from sandstone, slope alluvium and/or colluvium derived from sandstone, slope alluvium derived from sandstone
Elevation: 6,500 to 8,500 feet (1,981 to 2,591 meters)
Slope: 1 to 30 percent
Climatic data:
Mean annual precipitation: 13 to 20 inches (330 to 508 millimeters)
Mean annual air temperature: 40 to 45 degrees F. (4.4 to 7.2 degrees C.)
Frost-free period: 65 to 95 days

Taxonomic class: Loamy-skeletal, mixed Lithic Haploborolls

Typical Pedon

Map unit in which located: Tolman-Duffymont complex, 10 to 30 percent slopes, extremely stony
Location in the survey area: about 400 feet north and 400 feet west of the southeast corner of sec. 23, T. 5 N., R. 93 W.

A1—0 to 4 inches; brown (10YR 4/3) very stony fine sandy loam, brown (10YR 3/3) moist; weak fine granular structure; soft, very friable, slightly sticky and slightly plastic; 30 percent stones, 20 percent cobbles; mildly alkaline; abrupt wavy boundary.
A2—4 to 11 inches; brown (10YR 4/3) extremely stony fine sandy loam, dark brown (10YR 3/3) moist; weak medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; 50 percent stones, 20 percent cobbles; mildly alkaline; abrupt wavy boundary.
R—11 inches; hard sandstone bedrock.

Range in Characteristics

Particle-size control section:
Clay content: 10 to 18 percent
Rock fragment content: 50 to 75 percent, dominantly greater than 10 inches in diameter
Depth to lithic contact: 4 to 20 inches
Hue: 5YR to 10YR
Thickness of the mollic epipedon: 4 to 12 inches

A2 and C horizons:
Texture: extremely flaggy fine sandy loam or extremely stony fine sandy loam

Dunul Series

Map unit(s): 169
Depth class: very deep
Drainage class: excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Landform: hills
Position on landform: summits, backslopes
Parent material: relict fluvial gravel deposits
Elevation: 6,200 to 6,500 feet (1,890 to 1,981 meters)
Slope: 5 to 25 percent
Climatic data:
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Sandy-skeletal, mixed, frigid Typic Torriorthents

Typical Pedon

Map unit in which located: Ruedloff-Dunul complex, 5 to 25 percent slopes
Location in the survey area: about 800 feet east and

300 feet north of the southwest corner of sec. 23, T. 12 N., R. 96 W.

A—0 to 3 inches; pale brown (10YR 6/3) very gravelly loamy coarse sand, brown (10YR 4/3) moist; weak fine granular structure; soft, very friable, nonsticky and nonplastic; 25 percent gravel, 10 percent cobbles; slightly effervescent; moderately alkaline; abrupt smooth boundary.

Bw—3 to 8 inches; light brown (7.5YR 6/4) gravelly loamy coarse sand, brown (7.5YR 4/4) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; 10 percent cobbles, 5 percent gravel; slightly effervescent; moderately alkaline; abrupt smooth boundary.

Bk1—8 to 20 inches; very pale brown (10YR 7/3) very gravelly loamy coarse sand, pale brown (10YR 6/3) moist; single grained; loose, nonsticky and nonplastic; 30 percent gravel, 5 percent cobbles; violently effervescent; moderately alkaline; clear smooth boundary.

Bk2—20 to 31 inches; very pale brown (10YR 7/3) extremely gravelly loamy coarse sand, pale brown (10YR 6/3) moist; single grained; loose, nonsticky and nonplastic; 60 percent gravel, 15 percent cobbles; violently effervescent; moderately alkaline; clear smooth boundary.

Bk3—31 to 38 inches; very pale brown (10YR 7/3) gravelly loamy coarse sand, pale brown (10YR 6/3) moist; single grained; loose, nonsticky and nonplastic; 10 percent gravel, 5 percent cobbles; violently effervescent; moderately alkaline; gradual smooth boundary.

C1—38 to 50 inches; very pale brown (10YR 7/3) gravelly loamy coarse sand, pale brown (10YR 6/3) moist; single grained; loose, nonsticky and nonplastic; 15 percent gravel, 5 percent cobbles; strongly effervescent; moderately alkaline; gradual smooth boundary.

C2—50 to 60 inches; very pale brown (10YR 7/3) gravelly loamy coarse sand, pale brown (10YR 6/3) moist; single grained; loose, nonsticky and nonplastic; 25 percent gravel, 5 percent cobbles; strongly effervescent; moderately alkaline.

Range in Characteristics

Particle-size control section:

Rock fragment content: 35 to 50 percent, predominantly gravel and cobbles (15 to 65 percent within individual horizons)

Bk horizons:

Texture: very gravelly or extremely gravelly modifiers of loamy coarse sand or coarse sand

Rock fragment content: A thin layer with 15 to 35 percent rock fragments commonly occurs at various depths.

C horizon:

Texture: gravelly, very gravelly, or extremely gravelly modifiers of loamy coarse sand or coarse sand

Earsman Series

Map unit(s): 158
Depth class: very shallow to shallow
Drainage class: somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: mountainsides
Parent material: residuum and colluvium derived sandstone and quartzite
Elevation: 5,500 to 8,000 feet (1,676 to 2,438 meters)
Slope: 10 to 45 percent
Climatic data:
Mean annual precipitation: 11 to 16 inches (279 to 406 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Loamy-skeletal, mixed (calcareous), frigid Lithic Ustic Torriorthents

Typical Pedon

Map unit in which located: Rock Outcrop-Earsman complex, 10 to 45 percent slopes
Location in the survey area: about 1,600 feet east and 500 feet north of the southwest corner of sec. 18, T. 10 N., R. 103 W.

A1—0 to 2 inches; reddish brown (5YR 4/3) extremely stony loamy sand, dark reddish brown (5YR 3/2) moist; weak fine granular structure; soft, very friable, nonsticky and nonplastic; 20 percent gravel, 20 percent cobbles, 25 percent stones; mildly alkaline; clear smooth boundary.

A2—2 to 5 inches; reddish brown (5YR 4/3) extremely stony sandy loam, dark reddish brown (5YR 3/2) moist; weak medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; 20 percent gravel, 20 percent cobbles, 25 percent stones; mildly alkaline; clear smooth boundary.

AB—5 to 10 inches; reddish brown (2.5YR 5/4) extremely stony sandy loam, reddish brown (2.5YR 4/4) moist; weak medium subangular

blocky structure; soft, very friable, slightly sticky and slightly plastic; 20 percent gravel, 20 percent cobbles, 20 percent stones; mildly alkaline; clear smooth boundary.

Bk—10 to 12 inches; reddish brown (2.5YR 5/4) extremely stony sandy loam, reddish brown (2.5YR 4/4) moist; massive; soft, very friable, slightly sticky and slightly plastic; 20 percent gravel, 20 percent cobble, 20 percent stones; strongly effervescent; moderately alkaline; abrupt smooth boundary.

R—12 inches; Hard red sandstone bedrock.

Range in Characteristics

Particle-size control section:
Clay content: 12 to 18 percent
Rock fragment content: 45 to 65 percent
Depth to effervescence: 5 to 15 inches
Depth to lithic contact: 4 to 20 inches
Hue: 5YR or 2.5YR

Ecklund Series

Map unit(s): 61
Depth class: moderately deep
Drainage class: excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: plateaus
Parent material: residuum and eolian deposits derived from sandstone
Elevation: 5,400 to 6,000 feet (1,646 to 1,829 meters)
Slope: 1 to 12 percent
Climatic data:
Mean annual precipitation: 7 to 10 inches (178 to 254 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Frost-free period: 95 to 105 days

Taxonomic class: Mixed, mesic Typic Torripsamments

Typical Pedon

Map unit in which located: Ecklund-Tipperary complex, 1 to 12 percent slopes
Location in the survey area: about 2,500 feet north and 1,300 feet west of the southeast corner of sec. 23, T. 9 N., R. 102 W.

A—0 to 3 inches; light yellowish brown (10YR 6/4) loamy fine sand, brown (10YR 4/3) moist; weak medium platy structure parting to weak thin platy; soft, very friable, nonsticky and nonplastic; strongly effervescent; strongly alkaline; abrupt smooth boundary.

C1—3 to 24 inches; brownish yellow (10YR 6/6) loamy fine sand, yellowish brown (10YR 5/6) moist; massive; soft, very friable, nonsticky and nonplastic; strongly effervescent; strongly alkaline; gradual smooth boundary.

C2—24 to 36 inches; very pale brown (10YR 7/4) gravelly fine sand, light yellowish brown (10YR 6/4) moist; massive; soft, very friable, nonsticky and nonplastic; 30 percent gravel; violently effervescent; strongly alkaline; abrupt wavy boundary.

R—36 inches; hard sandstone bedrock.

Range in Characteristics

Depth to lithic contact: 20 to 40 inches
Hue: 2.5Y or 10YR
Reaction: moderately alkaline or strongly alkaline

C2 horizon:
Texture: gravelly loamy fine sand, gravelly fine sand, loamy fine sand, or fine sand
Rock fragment content: 10 to 30 percent gravel

Eghelm Series

Map unit(s): 9, 62, 63
Local phase(s): moist
Depth class: very deep
Drainage class: well drained, somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: alluvial fans, flood plains, terraces
Parent material: alluvium derived from mixed sources
Elevation: 5,300 to 6,400 feet (1,615 to 1,951 meters)
Slope: 0 to 3 percent
Climatic data:
Mean annual precipitation: 7 to 11 inches (178 to 279 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Frost-free period: 90 to 105 days

Taxonomic class: Coarse-loamy, mixed (calcareous), mesic Typic Torrifluvents

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Map unit in which located: Eghelm loamy fine sand, 0 to 3 percent slopes
Location in the survey area: about 600 feet north and 600 feet east of the southwest corner of sec. 27, T. 3 N., R. 101 W.

A—0 to 3 inches; light brown (7.5YR 6/4) loamy fine sand, brown (7.5YR 5/4) moist; weak very thick

platy structure parting to weak thick platy; slightly hard, very friable, slightly sticky and nonplastic; strongly effervescent; moderately alkaline; abrupt smooth boundary.

AC—3 to 17 inches; reddish yellow (7.5YR 6/6) stratified 70 percent fine sandy loam and 30 percent loamy fine sand, strong brown (7.5YR 5/6) moist; 70 percent platy rock structure and 30 percent weak medium subangular blocky structure; slightly hard, very friable, slightly sticky and nonplastic; strongly effervescent; moderately alkaline; gradual smooth boundary.

C1—17 to 52 inches; reddish brown (7.5YR 6/6) stratified 55 percent fine sandy loam, 25 percent loamy fine sand, and 20 percent loam; strong brown (7.5YR 5/6) moist; massive; slightly hard, very friable; slightly sticky and slightly plastic; strongly effervescent; moderately alkaline; abrupt smooth boundary.

C2—52 to 60 inches; yellowish red (5YR 5/6) stratified loam and silt loam, yellowish red (5YR 4/6) moist; massive; hard, friable, sticky and plastic; strongly effervescent; moderately alkaline.

Range in Characteristics

Particle-size control section:
Clay content: 10 to 18 percent
Rock fragment content:
Hue: 5YR through 10YR
Reaction: moderately alkaline or strongly alkaline
Note: In map units #9, Baroid-Eghelm complex, 0 to 3 percent slopes and #63, Eghelm loamy sand, moist, 0 to 3 percent slopes, there is a seasonal high water table between a depth of 5 and 7 feet from April through June. The exchangeable sodium ranges from 1 to 15 percent in some horizons above a depth of 40 inches.

A horizon:
Texture: loamy fine sand, loamy sand, or fine sandy loam

C horizons:
Texture: stratified sand, loamy fine sand, fine sandy loam, sandy clay loam, silt loam, or loam

Emlin Series

Map unit(s): 64, 65, 182, 235
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: pediments, concave and planar slopes on rolling plateaus, structural benches
Position on landform: footslopes, toeslopes
Parent material: alluvium derived from limestone and sandstone and in loess, alluvium derived from sandstone, loess
Elevation: 6,600 to 8,200 feet (2,012 to 2,499 meters)
Slope: 1 to 12 percent
Climatic data:
Mean annual precipitation: 13 to 16 inches (330 to 406 millimeters)
Mean annual air temperature: 42 to 46 degrees F. (5.6 to 7.8 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine-loamy, mixed Aridic Argiborolls

Typical Pedon

Map unit in which located: Emlin loam, 1 to 12 percent slopes
Location in the survey area: about 25 feet north and 2,200 feet west of the southeast corner of sec. 22, T. 5 N., R. 102 W.

A1—0 to 2 inches; dark grayish brown (10YR 4/2) loam, very dark grayish brown (10YR 3/2) moist; moderate thin platy structure; soft, very friable, slightly sticky and slightly plastic; 5 percent gravel; neutral; abrupt smooth boundary.

A2—2 to 5 inches; dark grayish brown (10YR 4/2) loam, very dark grayish brown (10YR 3/2) moist; weak very coarse subangular blocky structure parting to weak fine subangular blocky; slightly hard, friable, slightly sticky and slightly plastic; neutral; clear wavy boundary.

AB—5 to 11 inches; dark grayish brown (10YR 4/2) loam, very dark grayish brown (10YR 3/2) moist; moderate medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; neutral; clear wavy boundary.

Bt1—11 to 14 inches; yellowish brown (10YR 5/4) clay loam, brown (10YR 4/3) moist; dark grayish brown coatings on faces of peds; strong medium angular blocky structure parting to strong fine angular blocky; slightly hard, friable, slightly sticky and plastic; few faint clay films on faces of peds and along interstitial pores; strongly effervescent; moderately alkaline; clear wavy boundary.

Bt2—14 to 19 inches; yellowish brown (10YR 5/4) clay loam, dark yellowish brown (10YR 4/4) moist; strong medium angular blocky structure;

hard, firm, slightly sticky and plastic; few faint clay films on faces of peds and along interstitial pores; strongly effervescent; moderately alkaline; clear wavy boundary.

Bk1—19 to 30 inches; very pale brown (10YR 7/3) silty clay loam, pale brown (10YR 6/3) moist; weak medium subangular blocky structure; hard, firm, slightly sticky and plastic; 20 percent calcium carbonate equivalent; violently effervescent; moderately alkaline; gradual wavy boundary.

Bk2—30 to 41 inches; pinkish gray (7.5YR 7/3) silty clay loam, light brown (7.5YR 6/4) moist; massive; hard, firm, slightly sticky and plastic; 5 percent gravel; 35 percent calcium carbonate equivalent; violently effervescent; strongly alkaline; gradual wavy boundary.

Bk3—41 to 60 inches; very pale brown (10YR 7/3) silty clay loam, light yellowish brown (10YR 6/4) moist; massive; hard, firm, slightly sticky and plastic; 5 percent gravel; 30 percent calcium carbonate equivalent; violently effervescent; moderately alkaline.

Range in Characteristics

Particle-size control section:
Clay content: 0 to 10 percent gravel, predominantly less than 1 inch in diameter
Calcium carbonate equivalent: 20 to 40 percent
Depth to calcic horizon: 10 to 30 inches
Depth to effervescence: 5 to 25 inches; is effervescent at the surface in some pedons
Thickness of the mollic epipedon: 7 to 13 inches

A horizon:
Reaction: neutral or mildly alkaline

Bt horizons:
Hue: 7.5YR or 10YR
Texture: clay loam or loam
Clay content: 25 to 35 percent
Reaction: mildly alkaline or moderately alkaline

Bk horizons:
Hue: 7.5YR through 2.5Y
Texture: silty clay loam, clay loam, or loam

Evanot Series

Map unit(s): 66, 67, 68, 79, 80
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: benches, hills, hillslopes
Position on landform: backslopes
Parent material: loess
Elevation: 6,200 to 7,200 feet (1,890 to 2,195 meters)
Slope: 1 to 25 percent
Climatic data:
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine-loamy, mixed Aridic Argiborolls

Typical Pedon

Map unit in which located: Evanot loam, 1 to 12 percent slopes
Location in the survey area: 2,250 feet north and 100 feet west of the southeast corner of sec. 23, T. 6 N., R. 91 W.

Ap—0 to 8 inches; brown (10YR 5/3) loam, dark brown (10YR 3/3) moist; weak medium subangular blocky structure; soft, friable, slightly sticky and slightly plastic; many roots; mildly alkaline; abrupt smooth boundary.

Bt—8 to 20 inches; yellowish brown (10YR 5/4) clay loam, brown (10YR 4/3) moist; moderate medium prismatic structure parting to moderate medium subangular blocky; hard, friable, sticky and plastic; many roots; many distinct clay films on faces of peds; mildly alkaline; clear wavy boundary.

Bk1—20 to 33 inches; very pale brown (10YR 7/3) clay loam, brown (10YR 5/3) moist; moderate coarse subangular blocky structure parting to moderate medium subangular blocky; hard, friable, sticky and plastic; few roots; violently effervescent; moderately alkaline; gradual smooth boundary.

Bk2—33 to 42 inches; light yellowish brown (10YR 6/4) loam, brown (10YR 5/3) moist; weak coarse subangular blocky structure parting to moderate medium subangular blocky; hard, friable, sticky and plastic; violently effervescent; moderately alkaline; clear smooth boundary.

Bk3—42 to 51 inches; yellowish brown (10YR 5/4) loam, dark yellowish brown (10YR 4/4) moist; weak medium subangular blocky structure; hard, friable, slightly sticky and slightly plastic; violently effervescent; moderately alkaline; gradual smooth boundary.

Bk4—51 to 60 inches; light yellowish brown (10YR 6/4) loam, dark yellowish brown (10YR 4/4) moist; massive; hard, friable, slightly sticky and

slightly plastic; strongly effervescent; moderately alkaline.

Range in Characteristics

Depth to secondary calcium carbonate: 20 to 30 inches
Thickness of the mollic epipedon: 7 to 10 inches

A horizon:
Reaction: neutral or mildly alkaline

Bt horizon:
Hue: 7.5YR or 10YR
Texture: clay loam or silty clay loam

Fenster Series

Map unit(s): 69
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: fans, hills
Position on landform: footslopes, toeslopes
Parent material: alluvium and loess derived from siltstone
Elevation: 6,100 to 7,200 feet (1,859 to 2,194 meters)
Slope: 3 to 12 percent
Climatic data:
Mean annual precipitation: 9 to 11 inches (228 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine-silty, mixed (calcareous), frigid Typic Torriorthents

Typical Pedon

Map unit in which located: Fenster-Thenipel complex, 3 to 12 percent slopes
Location in the survey area: about 1,900 feet west and 2,200 feet north of the southeast corner of sec. 18, T. 10 N., R. 98 W.

A—0 to 2 inches; pale yellow (2.5Y 7/4) silt loam, olive brown (2.5Y 4/4) moist; moderate very fine platy structure; slightly hard, friable, sticky and plastic; 5 percent channers; violently effervescent; moderately alkaline; clear smooth boundary.
AC—2 to 11 inches; pale yellow (2.5Y 7/4) silty clay loam, light olive brown (2.5Y 5/4) moist; moderate fine platy structure parting to moderate very fine angular blocky; slightly hard, friable, sticky and plastic; 5 percent channers; violently effervescent; strongly alkaline; gradual smooth boundary.
C1—11 to 19 inches; very pale brown (10YR 7/4) silty clay loam, yellowish brown (10YR 5/4) moist; moderate fine prismatic structure parting to moderate fine subangular blocky; slightly hard, friable, sticky and plastic; 5 percent channers; violently effervescent; moderately alkaline; gradual smooth boundary.
C2—19 to 28 inches; very pale brown (10YR 7/4) silty clay loam, yellowish brown (10YR 5/6) moist; weak medium subangular blocky structure; slightly hard, friable, sticky and plastic; 10 percent channers; violently effervescent; moderately alkaline; gradual smooth boundary.
C3—28 to 60 inches; very pale brown (10YR 7/4) silty clay loam, yellowish brown (10YR 5/6) moist; massive; slightly hard, friable, sticky and plastic; 10 percent channery fragments; violently effervescent; moderately alkaline.

Range in Characteristics

Particle-size control section:
Rock fragment content: 5 to 10 percent channers
Hue: 10YR or 2.5Y

A horizon:
Reaction: moderately alkaline or strongly alkaline

C horizon:
Texture: loam, silty clay loam, or silt loam

Fluvaquents

Map unit(s): 70, 231
Local phase(s): frequently flooded
Depth class: very deep
Drainage class: very poorly drained, poorly drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: lower flood plains, oxbows, flood plains, depressions on stream terraces
Parent material: alluvium derived from mixed sources, various source alluvium
Elevation: 4,700 to 8,000 feet (1,433 to 2,438 meters)
Slope: 0 to 1 percent
Climatic data:
Mean annual precipitation: 5 to 18 inches (127 to 457 millimeters)
Mean annual air temperature: 40 to 49 degrees F. (4.4 to 9.5 degrees C.)
Frost-free period: 65 to 140 days

Taxonomic class: Fluvaquents

Typical Pedon

Map unit in which located: Fluvaquents and Haplaquolls soils, frequently flooded
Location in the survey area: about 1,100 feet south and 900 feet east of the northwest corner of sec. 2, T. 7 N., R. 95 W.

A—0 to 4 inches; dark grayish brown (10YR 4/2) sandy loam, very dark grayish brown (10YR 3/2) moist; moderate medium granular structure; soft, very friable, slightly sticky and slightly plastic; slightly effervescent; mildly alkaline; clear wavy boundary.
Cg1—4 to 25 inches; gray (10YR 5/1) sandy clay loam stratified with thin lenses of sandy loam, dark gray (10YR 4/1) moist; common fine prominent strong brown (7.5YR 5/6) mottles; 70 percent platy rock structure and 30 percent weak medium subangular blocky; hard, firm, sticky and plastic; slightly effervescent; mildly alkaline; clear smooth boundary.
Cg2—25 to 48 inches; gray (10YR 6/1) clay loam stratified with thin lenses of sandy clay loam, gray (10YR 5/1) moist; common medium distinct reddish yellow (7.5YR 6/6) mottles; platy rock structure; hard, firm, sticky and plastic; slightly effervescent; mildly alkaline; clear smooth boundary.
C—48 to 60 inches; light gray (2.5Y 7/2) fine sandy loam stratified with thin lenses of loamy fine sand, grayish brown (2.5Y 5/2) moist; common medium prominent reddish yellow (7.5YR 6/6) mottles; platy rock structure; slightly hard, very friable, slightly sticky and slightly plastic; slightly effervescent; mildly alkaline.

Range in Characteristics

Note: These soils are in the sandy, sandy-skeletal, coarse-loamy, fine-loamy, fine-loamy over sandy or sandy-skeletal, fine, or clayey over sandy or sandy-skeletal particle-size families. The water table is at or near the surface during the spring and early summer. In some areas the water table remains above a depth of 1 foot throughout the year, while in other areas the water table is at a depth of 1 foot to 3 feet during late summer, fall, and winter.

C horizons:
Hue: 10YR through 5Y
Texture: stratified extremely gravelly sand, loamy sand, sandy loam, sandy clay loam, loam, or clay loam
Reaction: mildly alkaline or moderately alkaline

Flygare Series

Map unit(s): 71, 74
Local phase(s): dry
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: mountainsides, mountain plateaus
Parent material: colluvium and residuum derived from sandstone, colluvium derived from sandstone and shale
Elevation: 7,000 to 8,400 feet (2,134 to 2,560 meters)
Slope: 3 to 65 percent
Climatic data:
Mean annual precipitation: 18 to 22 inches (457 to 559 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Frost-free period: 50 to 75 days

Taxonomic class: Loamy-skeletal, mixed Cryic Pachic Paleborolls

Typical Pedon

Map unit in which located: Flygare loam, dry, 25 to 65 percent slopes
Location in the survey area: about 600 feet west and 1,200 feet north of the southeast corner of sec. 35, T. 4 N., R. 91 W.

Oi—0 to 1 inch; slightly decomposed leaves and twigs.
A1—1 inch to 11 inches; grayish brown (10YR 5/2) loam, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure parting to weak fine granular; soft, very friable, slightly sticky and slightly plastic; 10 percent gravel; neutral; gradual smooth boundary.
A2—11 to 22 inches; grayish brown (10YR 5/2) loam, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure parting to weak fine subangular blocky; soft, very friable, slightly sticky and slightly plastic; 10 percent gravel, 5 percent cobbles; neutral, abrupt smooth boundary.
E/B—22 to 29 inches; 70 percent white (2.5Y 8/2) and 30 percent yellow (2.5Y 7/6) very cobbly loam, light gray (2.5Y 7/2) and light yellowish brown (2.5Y 6/4) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; slightly hard, friable, sticky and plastic; 25 percent gravel, 35 percent cobbles; neutral; gradual smooth boundary.
Bt1—29 to 35 inches; yellow (2.5Y 7/6) very cobbly

clay loam, light yellowish brown (2.5Y 6/4) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; hard, firm, sticky and plastic; few faint clay films on faces of peds; 25 percent gravel, 35 percent cobbles; neutral; gradual smooth boundary.

Bt2—35 to 60 inches; yellow (2.5Y 7/6) extremely cobbly clay loam, light yellowish brown (2.5Y 6/4) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; hard, firm, sticky and plastic; few faint clay films on faces of peds; 25 percent gravel, 45 percent cobbles; neutral.

Range in Characteristics

Depth to argillic horizon: 60 or more inches
Thickness of the mollic epipedon: 20 to 24 inches

Bt horizons:
Hue: 10YR or 2.5Y
Texture: very cobbly clay loam or extremely cobbly clay loam
Rock fragment content: 50 to 70 percent, 1 inch to 10 inches in diameter

Flynncove Series

Map unit(s): 258, 260
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: fan remnants, mountain slopes
Parent material: slope alluvium and colluvium derived from sandstone and quartzite, slope alluvium derived from sandstone and quartzite
Elevation: 6,800 to 9,000 feet (2,073 to 2,743 meters)
Slope: 4 to 50 percent
Climatic data:
Mean annual precipitation: 16 to 22 inches (406 to 559 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Frost-free period: 70 to 90 days

Taxonomic class: Loamy-skeletal, siliceous, superactive, frigid Typic Argiustolls

Typical Pedon

Map unit in which located: Cortyzack-Flynncove association, 3 to 25 percent slopes, from the Uintah Area, Utah Soil Survey
Location in the Uintah Area, Utah survey area: about 30 miles northeast of Vernal on Diamond Mountain; about 2,700 feet south and 1,400 feet east of the northwest corner of sec. 36, T. 1 S., R. 24 E., SLBM; Crouse Reservoir, Utah USGS quadrangle; latitude 40 degrees, 41 minutes, 29 seconds north and longitude 109 degrees, 10 minutes, 25 seconds west; NAD 27.

The soil surface is covered by 5 percent cobbles and 5 percent gravel.

A1—0 to 3 inches; dark brown (7.5YR 4/2) cobbly loam, very dark brown (7.5YR 2/2) moist; moderate very fine granular structure; soft, very friable, slightly sticky and slightly plastic; many very fine and common fine, medium and coarse roots; common very fine, fine and few medium and coarse tubular pores; 10 percent cobbles and 5 percent gravel; neutral (pH 7.0); abrupt smooth boundary.

A2—3 to 8 inches; brown (7.5YR 4/2) cobbly loam; dark brown (7.5YR 3/2) moist; moderate coarse subangular blocky structure parting to moderate very fine and fine subangular blocky; slightly hard, friable, slightly sticky and slightly plastic; many very fine, common fine, and few medium and coarse roots; common very fine and fine, few medium tubular pores; 10 percent cobbles and 10 percent gravel; neutral (pH 7.0); clear smooth boundary.

Bt1—8 to 15 inches; reddish brown (5YR 4/3) cobbly sandy clay loam, dark reddish brown (5YR 3/3) moist; weak coarse prismatic structure parting to moderate very fine and fine subangular blocky; very hard, firm, moderately sticky and moderately plastic; common very fine and fine and few medium and coarse roots; common very fine and fine and few medium tubular pores; common distinct clay films on faces of peds and pores; 5 percent stones, 10 percent cobbles, and 15 percent gravel; neutral (pH 7.0); clear wavy boundary.

Bt2—15 to 24 inches; reddish brown (2.5YR 4/4) extremely cobbly sandy clay loam, dark reddish brown (2.5YR 3/4) moist; moderate medium subangular blocky structure parting to moderate very fine and fine subangular blocky; very hard, firm, moderately sticky and moderately plastic; common very fine and fine and few medium and coarse roots; common very fine and fine and few medium tubular pores; common distinct clay films on faces of peds and in pores; 10 percent stones, 20 percent cobbles, and 35 percent gravel; neutral (pH 7.0); gradual wavy boundary.

Bt3—24 to 37 inches; reddish brown (2.5YR 4/4) extremely cobbly sandy clay loam, dark red (2.5YR 3/6) moist; moderate medium and coarse

subangular blocky structure parting to moderate very fine, fine and medium subangular blocky; hard, firm, moderately sticky and moderately plastic; few very fine, fine, medium, and coarse roots; common very fine and fine and few medium tubular pores; common distinct clay films on ped faces and in pores; 10 percent stones, 30 percent cobbles, and 30 percent gravel; neutral (pH 7.0) gradual irregular boundary.

C—37 to 60 inches; reddish brown (2.5YR 5/4) extremely cobbly sandy loam, reddish brown (2.5YR 4/4) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few very fine, fine, medium and coarse roots; few medium tubular and common very fine and fine interstitial pores; 10 percent stones, 30 percent cobbles, and 25 percent gravel; slightly alkaline (pH 7.4).

Range in Characteristics

Particle-size control section (weighted average):
- *Clay content:* 27 to 35 percent
- *Rock fragment content:* 50 to 80 percent

Mean annual soil temperature: 42 to 46 degrees F.
Moisture control section: is affected by precipitation that falls evenly throughout the year with a slight increase in late summer and early fall
Moisture regime: typic ustic
Thickness of the argillic horizon: 15 to 47 inches
Thickness of the mollic epipedon: 13 to 15 inches

A horizon:
- *Hue:* 2.5YR to 7.5YR
- *Value:* 4 or 5 dry, 2 or 3 moist
- *Chroma:* 2 to 4 dry or moist
- *Texture:* cobbly loam or extremely stony loam
- *Rock fragment content:* 15 to 70 percent gravel, cobbles, and stones
- *Reaction:* neutral or slightly alkaline
- *Note:* Some pedons have extremely stony sandy loam transitional AB horizons.

Bt horizon:
- *Hue:* 10R to 5YR
- *Value:* 4 or 5 dry, 3 or 4 moist
- *Chroma:* 3 to 6 dry or moist
- *Texture:* cobbly sandy clay loam, extremely cobbly sandy clay loam, and extremely stony sandy clay loam, or very cobbly sandy clay loam
- *Rock fragment content:* 15 to 70 percent gravel, cobbles, and stones
- *Reaction:* neutral or slightly alkaline

C horizon: (if present)
- *Hue:* 2.5YR or 5YR
- *Value:* 4 or 5 dry, 4 moist
- *Chroma:* 3 or 4 dry or moist
- *Texture:* extremely cobbly sandy loam
- *Rock fragment content:* 60 to 80 percent gravel, cobbles, and stones
- *Reaction:* slightly alkaline or moderately alkaline

Foidel Series

Map unit(s): 34, 72, 73, 74
Local phase(s): cool, moist
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: mountainsides, plateaus, mountain plateaus
Parent material: alluvium and residuum derived from sandstone, colluvium derived from sandstone, loess and colluvium derived from fine grained sandstone and shale, loess and residuum derived from fine grained sandstone and shale
Elevation: 7,000 to 9,000 feet (2,134 to 2,743 meters)
Slope: 3 to 65 percent
Climatic data:
- *Mean annual precipitation:* 18 to 22 inches (457 to 559 millimeters)
- *Mean annual air temperature:* 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
- *Frost-free period:* 50 to 75 days

Taxonomic class: Fine-loamy, mixed Cryic Pachic Paleborolls

Typical Pedon

Map unit in which located: Foidel loam, cool, 3 to 25 percent slopes
Location in the survey area: about 1,600 feet east and 300 feet north of the southwest corner of sec. 31, T. 6 N., R. 90 W.

Oi—0 to 2 inches; very dark brown (10YR 3/4) and dark brown (10YR 3/3) partly decomposed leaf pieces and decaying twigs.

A1—2 to 12 inches; gray (10YR 5/1) loam, very dark gray (10YR 3/1) moist; weak very coarse to medium granular structure; slightly hard, very friable, slightly sticky and slightly plastic; neutral; clear wavy boundary.

A2—12 to 28 inches; gray (10YR 5/1) loam, very dark gray (10YR 3/1) moist; moderate fine and medium granular structure; soft, very friable, slightly sticky and slightly plastic; neutral; clear wavy boundary.

E/B—28 to 32 inches; light brownish gray (10YR 6/2) clay loam, very dark grayish brown (10YR 3/2) moist; moderate fine and medium subangular

blocky and weak medium platy structure; very hard, friable, sticky and plastic; neutral; clear wavy boundary.

B/E—32 to 39 inches; 70 percent pale brown (10YR 6/3) clay loam, brown (10YR 4/3) moist with 30 percent light brownish gray (10YR 6/2) clay loam, very dark grayish brown (10YR 3/2) moist; moderate medium subangular blocky structure, very hard, firm, sticky and plastic; neutral; clear wavy boundary.

Bt—39 to 60 inches; light yellowish brown (10YR 6/4) clay loam, yellowish brown (10YR 5/4) moist; strong coarse angular blocky structure; very hard, firm, sticky and plastic; very few faint clay films on faces of peds; neutral.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 0 to 10 percent
Thickness of the mollic epipedon: 20 to 35 inches
Note: The Foidel soil in map unit #261, Clayburn-Foidel complex, 25 to 55 percent slopes, very bouldery, is a taxadjunct to the Foidel series because the mollic epipedon is 10 to 15 inches thick. In this map unit, the soil has an E horizon with a texture of fine sandy loam.

E/B horizon:
Texture: sandy clay loam, loam, or clay loam
Clay content: 24 to 35 percent
Reaction: moderately acid or slightly acid

Bt horizon:
Hue: 10YR or 7.5YR
Texture: sandy clay loam with 20 to 35 percent clay
Clay content: 27 to 35 percent
Reaction: moderately acid or slightly acid

Fonce Series

Map unit(s): 75, 76
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: fan terraces, plateaus
Parent material: colluvium and alluvium derived from sandstone, eolian deposits over relict fluvial deposits derived from mixed sources
Elevation: 6,000 to 7,800 feet (1,829 to 2,377 meters)
Slope: 1 to 12 percent
Climatic data:
Mean annual precipitation: 10 to 13 inches (254 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine-loamy, mixed Borollic Haplargids

Typical Pedon

Map unit in which located: Fonce sandy loam, 1 to 8 percent slopes
Location in the survey area: about 600 feet south and 50 feet west of the northeast corner of sec. 8, T. 11 N., R. 94 W.

A—0 to 3 inches; brown (10YR 5/3) sandy loam, dark yellowish brown (10YR 4/4) moist; moderate fine and medium granular structure; soft, friable, slightly sticky and nonplastic; neutral; clear smooth boundary.

Bt1—3 to 10 inches; light brown (7.5YR 6/4) sandy clay loam, brown (7.5YR 4/4) moist; moderate medium subangular blocky structure; slightly hard, friable, sticky and slightly plastic; common distinct clay films on faces of peds; mildly alkaline; clear wavy boundary.

Bt2—10 to 15 inches; light yellowish brown (10YR 6/4) sandy clay loam, yellowish brown (10YR 5/4) moist; moderate medium prismatic structure parting to moderate coarse subangular; slightly hard, firm, sticky and slightly plastic; common distinct clay films on faces of peds; 5 percent gravel; mildly alkaline; abrupt wavy boundary.

2Bk1—15 to 23 inches; white (10YR 8/2) and very pale brown (10YR 7/3) gravelly sandy clay loam, light gray (10YR 7/2) and pale brown (10YR 6/3) moist; weak coarse subangular blocky structure; hard, firm, sticky and nonplastic; 15 percent gravel; calcium carbonate disseminated; 30 percent calcium carbonate equivalent; violently effervescent; moderately alkaline; clear wavy boundary.

2Bk2—23 to 33 inches; white (10YR 8/2) very gravelly coarse sandy loam, light gray (10YR 7/2) moist; massive; soft, friable, slightly sticky and nonplastic; 40 percent gravel, 5 percent cobbles; calcium carbonate disseminated; 20 percent calcium carbonate equivalent; violently effervescent; strongly alkaline; gradual wavy boundary.

2Bk3—33 to 53 inches; light gray (10YR 7/2) gravelly sand, very pale brown (10YR 7/4) moist; single grained, loose, nonsticky and nonplastic; 20 percent gravel; calcium carbonate disseminated; 10 percent calcium carbonate equivalent;

violently effervescent; strongly alkaline; gradual wavy boundary.
2Bk4—53 to 59 inches; light gray (10YR 7/2) gravelly coarse sand, very pale brown (10YR 7/4) moist; single grained; loose, nonsticky and nonplastic; 25 percent gravel; visible calcium carbonate occurs only as pendants on gravel; strongly effervescent; moderately alkaline; gradual irregular boundary.
2C—59 to 60 inches; very pale brown (10YR 8/3) gravelly coarse sand, very pale brown (10YR 7/4) moist; single grained; loose, nonsticky and nonplastic; 25 percent gravel; mildly alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Calcium carbonate equivalent: 15 to 40 percent
Depth to argillic horizon: 12 to 25 inches
Depth to calcic horizon: 12 to 25 inches
Depth to secondary calcium carbonate: 8 to 25 inches

A horizon:
Hue: 7.5YR or 10YR
Reaction: neutral or mildly alkaline

Bt horizon:
Hue: 7.5YR or 10YR
Texture: sandy clay loam, sandy loam, gravelly sandy loam, or gravelly sandy clay loam
Clay content: 18 to 27 percent
Rock fragment content: 0 to 20 percent
Reaction: neutral or mildly alkaline

2Bk1 and 2Bk2 horizons:
Hue: 2.5Y through 7.5YR
Texture: gravelly, very gravelly, or very cobbly modifiers of coarse sandy loam, sandy loam, or sandy clay loam
Rock fragment content: 20 to 60 percent
Reaction: moderately alkaline or strongly alkaline

2Bk3 and 2Bk4 horizons:
Hue: 2.5Y through 7.5YR
Texture: gravelly, very gravelly, or very cobbly modifiers of sandy loam, loamy sand, or coarse sand
Rock fragment content: 20 to 60 percent

Fondillas Series

Map unit(s): 58
Depth class: shallow
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: planar and convex slopes on dissected plateaus
Parent material: residuum derived from fine grained sandstone and siltstone
Elevation: 6,600 to 7,200 feet (2,012 to 2,195 meters)
Slope: 2 to 15 percent
Climatic data:
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Loamy-skeletal, mixed (calcareous), frigid Lithic Torriorthents

Typical Pedon

Map unit in which located: Fondillas loam in an area of Diaflats-Fondillas complex, 2 to 15 percent slopes
Location in the survey area: about 900 feet west and 200 feet south of the northeast corner of sec. 35, T. 12 N., R. 101 W.

A—0 to 2 inches; pale yellow (2.5Y 7/4) loam, yellowish brown (10YR 5/4) moist; moderate thin platy structure; soft, very friable, sticky and plastic; strongly effervescent; moderately alkaline; abrupt smooth boundary.
AC—2 to 5 inches; light yellowish brown (10YR 6/4) loam, yellowish brown (10YR 5/4) moist; weak coarse subangular blocky structure; soft, friable, sticky and plastic; 15 percent channers; strongly effervescent; moderately alkaline; abrupt wavy boundary.
C—5 to 11 inches; pale yellow (10YR 7/4) extremely flaggy loam, light yellowish brown (10YR 6/4) moist; massive; soft, friable, slightly sticky and slightly plastic; 50 percent flagstones, 25 percent channery fragments; violently effervescent; moderately alkaline; abrupt smooth boundary.
R—11 inches; hard, fractured sandstone bedrock.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 18 to 27 percent
Rock fragment content: 35 to 75 percent
Depth to lithic contact: 10 to 20 inches
Hue: 10YR or 2.5Y

AC horizon:
Texture: loam or channery loam

C horizon:
Texture: very flaggy, extremely flaggy, or very channery modifiers of loam or silt loam

Forelle Series

Map unit(s): 77, 78, 79, 80, 81, 82
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: benches, hills, hillslopes
Position on landform: footslopes, toeslopes
Parent material: alluvium derived from shale and sandstone, loess, loess and in alluvium derived from shale and sandstone
Elevation: 6,200 to 7,200 feet (1,890 to 2,195 meters)
Slope: 1 to 25 percent
Climatic data:
Mean annual precipitation: 11 to 15 inches (279 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine-loamy, mixed Borollic Haplargids

Typical Pedon

Map unit in which located: Forelle loam, 3 to 12 percent slopes
Location in the survey area: about 1,800 feet east and 1,800 feet north of the southwest corner of sec. 16, T. 4 N., R. 93 W.

A—0 to 5 inches; brown (7.5YR 5/4) loam, brown (10YR 4/2) moist; weak fine granular structure; soft, very friable, slightly sticky and slightly plastic; mildly alkaline; clear smooth boundary.
Bt1—5 to 11 inches; brown (7.5YR 5/2) clay loam, dark brown (7.5YR 4/2) moist; weak medium subangular blocky structure; slightly hard, firm, sticky and plastic; very few faint clay films on faces of peds; mildly alkaline; clear wavy boundary.
Bt2—11 to 23 inches; brown (7.5YR 5/3) clay loam, brown (7.5YR 5/2) moist; moderate coarse subangular blocky structure parting to moderate medium subangular blocky; hard, firm, sticky and plastic; common faint clay films on faces on peds; mildly alkaline; clear wavy boundary.
Bk1—23 to 34 inches; light brownish gray (10YR 6/2) loam, brown (10YR 5/3) moist; moderate medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common fine concentrations of calcium carbonate; strongly effervescent; moderately alkaline; gradual wavy boundary.
Bk2—34 to 42 inches; pale brown (10YR 6/3) loam, grayish brown (10YR 5/2) moist; weak coarse subangular blocky structure; slightly hard, firm, slightly sticky and slightly plastic; common fine concentrations of calcium carbonate; strongly effervescent; moderately alkaline; gradual wavy boundary.
Bk3—42 to 51 inches; pale brown (10YR 6/3) sandy clay loam, brown (10YR 5/3) moist; weak coarse subangular blocky structure; slightly hard, firm, slightly sticky and slightly plastic; common fine concentrations of calcium carbonate; strongly effervescent; moderately alkaline; abrupt wavy boundary.
Bk4—51 to 60 inches; pale brown (10YR 6/3) sandy loam, brown (10YR 5/3) moist; massive; slightly hard, very friable, slightly sticky and slightly plastic; few fine concentrations of calcium carbonate; slightly effervescent; moderately alkaline.

Range in Characteristics

Depth to argillic horizon: 18 to 25 inches
Depth to secondary calcium carbonate: 15 to 25 inches

Bt horizon:
Hue: 7.5YR or 10YR

Bk3 and Bk4 horizons:
Texture: loam, sandy loam, or sandy clay loam

Forsey Series

Map unit(s): 53, 83
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: convex and planar areas on mountainsides, convex positions on mountainsides, convex and planar areas on plateaus
Parent material: relict fluvial deposits derived from sandstone and quartzite
Elevation: 7,000 to 9,000 feet (2,134 to 2,743 meters)
Slope: 3 to 35 percent
Climatic data:
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Frost-free period: 50 to 75 days

Taxonomic class: Loamy-skeletal, mixed Argic Cryoborolls

Typical Pedon

Map unit in which located: Forsey-Libeg complex, 3 to 25 percent slopes, very stony
Location in the survey area: 2,100 feet east and 2,000 feet north of the southwest corner of sec. 5, T. 11 N., R. 102 W.

A—0 to 2 inches; brown (10YR 5/3) cobbly sandy loam, very dark grayish brown (10YR 3/2) moist; weak medium granular structure; soft, very friable, nonsticky and nonplastic; 10 percent gravel, 10 percent cobbles, 5 percent stones; neutral; clear wavy boundary.
AB—2 to 8 inches; brown (7.5YR 5/3) cobbly sandy loam, dark brown (7.5YR 3/2) moist; weak coarse subangular blocky structure parting to moderate medium granular; slightly hard, friable, nonsticky and nonplastic; 15 percent gravel, 10 percent cobbles, 5 percent stones; neutral; clear wavy boundary.
Bt1—8 to 18 inches; brown (7.5YR 5/4) very cobbly sandy clay loam, dark brown (7.5YR 4/4) moist; moderate medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; few faint clay films on faces of peds; 20 percent gravel, 20 percent cobbles, 5 percent stones, neutral; clear wavy boundary.
Bt2—18 to 24 inches; brown (7.5YR 5/4) very cobbly sandy loam, dark brown (7.5YR 4/4) moist; moderate medium subangular blocky structure; slightly hard, friable, slightly sticky and nonplastic; few clay films bridging sand grains; 25 percent gravel, 20 percent cobbles, 10 percent stones; neutral; clear wavy boundary.
Bk—24 to 60 inches; light brown (7.5YR 6/4) very cobbly sandy loam, brown (7.5YR 5/4) moist; massive, slightly hard, very friable, nonsticky and nonplastic; 25 percent gravel, 25 percent cobbles, 10 percent stones; calcium carbonate disseminated and as coatings on rock fragments; strongly effervescent; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 18 to 27 percent
Rock fragment content: 35 to 60 percent
Depth to argillic horizon: 15 to 30 inches
Depth to secondary calcium carbonate: 20 to 30 inches
Thickness of the mollic epipedon: 7 to 10 inches

A horizon:
Hue: 7.5YR or 10YR

Bt horizon:
Hue: 5YR or 7.5YR
Texture: very cobbly sandy loam or very cobbly sandy clay loam

Bk horizon:
Hue: 5YR through 10YR

Fughes Series

Map unit(s): 98
Depth class: very deep
Drainage class: well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Landform: hillslopes
Parent material: colluvium derived from shale
Elevation: 6,800 to 7,700 feet (2,073 to 2,347 meters)
Slope: 10 to 20 percent
Climatic data:
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine, montmorillonitic Pachic Argiborolls

Typical Pedon

Map unit in which located: Herm-Fughes complex, 10 to 20 percent slopes, extremely bouldery
Location in the survey area: about 1,700 feet west and 2,000 feet south of the northeast corner of sec. 35, T. 9 N., R. 89 W.

A1—0 to 9 inches; dark brown (10YR 4/3) bouldery loam, very dark grayish brown (10YR 3/2) moist; weak coarse subangular blocky structure parting to weak fine subangular blocky; soft, very friable, slightly sticky and slightly plastic; 5 percent gravel, 5 percent cobbles, 5 percent stones, 5 percent boulders; neutral; clear smooth boundary.
A2—9 to 19 inches; dark brown (10YR 4/3) bouldery loam, very dark grayish brown (10YR 3/2) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; soft, very friable, slightly sticky and slightly plastic; 5 percent gravel, 5 percent cobbles, 5 percent stones, 5 percent boulders; neutral; abrupt smooth boundary.

Bt1—19 to 30 inches; strong brown (7.5YR 5/6) clay; strong brown (7.5YR 4/6) moist; strong medium prismatic structure parting to strong medium subangular blocky; very hard, firm, very sticky and very plastic; many distinct clay films on faces of peds and along interstitial pores; 5 percent gravel, 5 percent cobbles; slightly acid; gradual smooth boundary.

Bt2—30 to 46 inches; reddish yellow (7.5YR 6/6) clay, strong brown (7.5YR 5/6) moist; strong coarse subangular blocky structure parting to strong medium subangular blocky; very hard, firm, very sticky and very plastic; common distinct clay films on faces of peds and along interstitial pores; 5 percent gravel, 5 percent cobbles; neutral; clear smooth boundary.

Bk—46 to 60 inches; reddish yellow (7.5YR 7/6) clay, reddish yellow (7.5YR 6/6) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; 5 percent gravel, 5 percent cobbles; common fine concentrations of calcium carbonate; violently effervescent; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 5 to 15 percent; fragments are less than 10 inches in diameter
Depth to argillic horizon: 40 to 60 inches
Depth to secondary calcium carbonate: 40 to 60 inches
Thickness of the mollic epipedon: 16 to 20 inches

B horizons:
Hue: 10YR or 7.5YR

Garlips Series

Map unit(s): 140
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: drainageways on hills
Parent material: colluvium derived from sandstone and basal conglomerate
Elevation: 6,800 to 8,100 feet (2,073 to 2,469 meters)
Slope: 15 to 45 percent
Climatic data:
Mean annual precipitation: 13 to 14 inches (330 to 356 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 90 days

Taxonomic class: Fine-loamy, mixed Pachic Haploborolls

Typical Pedon

Map unit in which located: Ninot-Crago-Garlips complex, 15 to 45 percent slopes
Location in the survey area: about 700 feet west and 250 feet north of the southeast corner of sec. 22, T. 5 N., R. 98 W.

A1—0 to 4 inches; grayish brown (10YR 5/2) loam, very dark grayish brown (10YR 3/2) moist; moderate fine granular structure; soft, very friable, sticky and slightly plastic; mildly alkaline; abrupt smooth boundary.

A2—4 to 8 inches; dark grayish brown (10YR 4/2) loam, very dark grayish brown (10YR 3/2) moist; moderate fine subangular blocky structure; soft, friable, sticky and plastic; mildly alkaline; clear wavy boundary.

A3—8 to 14 inches; dark grayish brown (10YR 4/2) clay loam, very dark grayish brown (10YR 3/2) moist; weak fine subangular blocky structure; soft, friable, sticky and plastic; mildly alkaline; clear wavy boundary.

BA—14 to 21 inches; grayish brown (10YR 5/2) clay loam, dark brown (10YR 3/3) moist; moderate medium subangular blocky structure; slightly hard, friable, sticky and plastic; slightly effervescent; mildly alkaline; abrupt irregular boundary.

Bk1—21 to 30 inches; pale brown (10YR 6/3) clay loam, yellowish brown (10YR 5/4) moist; moderate medium subangular blocky structure; slightly hard, firm, sticky and plastic; 15 percent gravel; 14 percent calcium carbonate equivalent; strongly effervescent; moderately alkaline; gradual wavy boundary.

Bk2—30 to 41 inches; very pale brown (10YR 7/3) clay loam, light yellowish brown (10YR 6/4) moist; weak medium subangular blocky structure; slightly hard, firm, sticky and plastic; 14 percent gravel; 30 percent calcium carbonate equivalent; violently effervescent; moderately alkaline; gradual wavy boundary.

Bk3—41 to 51 inches; very pale brown (10YR 7/3) clay loam, light yellowish brown (10YR 6/4) moist; massive; slightly hard, firm, sticky and plastic; 5 percent gravel; 25 percent calcium carbonate equivalent; violently effervescent; moderately alkaline; clear wavy boundary.

Bk4—51 to 60 inches; pink (7.5YR 7/4) clay loam, brown (7.5YR 5/4) moist; massive; slightly hard, firm, sticky and plastic; 5 percent gravel; 15

percent calcium carbonate equivalent; violently effervescent; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 5 to 20 percent
Calcium carbonate equivalent: 15 to 35 percent
Depth to calcic horizon: 18 to 35 inches

Bk horizons:
Hue: 7.5YR through 2.5Y
Texture: gravelly loam, gravelly clay loam, loam, or clay loam
Reaction: moderately alkaline or strongly alkaline

Gebson Series

Map unit(s): 84
Local phase(s): moist
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: mountainsides
Parent material: colluvium derived from basalt and sandstone
Elevation: 7,000 to 8,600 feet (2,134 to 2,621 meters)
Slope: 5 to 25 percent
Climatic data:
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Frost-free period: 50 to 75 days

Taxonomic class: Fine-loamy, mixed Argic Cryoborolls

Typical Pedon

Map unit in which located: Gebson, moist-Youga complex, 5 to 25 percent slopes, extremely stony
Location in the survey area: about 1,800 feet east and 900 feet south of the northwest corner of sec. 35, T. 12 N., R. 89 W.

A—0 to 2 inches; dark grayish brown (10YR 4/2) very bouldery sandy loam, very dark grayish brown (10YR 3/2) moist; weak fine granular structure; soft, very friable, slightly sticky and nonplastic; 20 percent gravel, 10 percent cobbles, 15 percent stones, 15 percent boulders; neutral; abrupt smooth boundary.

AB—2 to 7 inches; dark brown (10YR 4/3) very bouldery sandy clay loam, very dark grayish brown (10YR 3/2) moist; moderate fine and medium granular structure; slightly hard, friable, slightly sticky and nonplastic; 20 percent gravel, 10 percent cobbles, 5 percent stones, 10 percent boulders; neutral; abrupt smooth boundary.

Bt—7 to 13 inches; brown (10YR 5/3) gravelly sandy clay loam, brown (10YR 4/3) moist; moderate fine and medium subangular blocky structure; hard, friable, sticky and slightly plastic; few distinct clay films on faces of peds; 15 percent gravel, 5 percent cobbles; neutral; gradual smooth boundary.

Bk1—13 to 24 inches; 50 percent very pale brown (10YR 7/3) and 50 percent brown (10YR 5/3) sandy clay loam, pale brown (10YR 6/3) and dark yellowish brown (10YR 5/4) moist; moderate coarse subangular blocky structure parting to weak medium subangular blocky; hard, firm, sticky and slightly plastic; 10 percent gravel; many concentrations of calcium carbonate; violently effervescent; moderately alkaline; clear smooth boundary.

Bk2—24 to 60 inches; very pale brown (10YR 8/3) gravelly sandy clay loam, very pale brown (10YR 7/3) moist; massive; hard, firm, sticky and slightly plastic; 15 percent gravel, 5 percent cobbles; many concentrations of calcium carbonate; violently effervescent; moderately alkaline.

Range in Characteristics

Depth to argillic horizon: 12 to 20 inches
Depth to secondary calcium carbonate: 12 to 20 inches
Thickness of the mollic epipedon: 7 to 10 inches

Bt horizon:
Texture: sandy clay loam or gravelly sandy clay loam
Rock fragment content: 10 to 25 percent
Reaction: neutral or mildly alkaline

Bk horizon:
Texture: sandy clay loam, sandy loam, gravelly sandy clay loam, or gravelly sandy loam
Rock fragment content: 10 to 25 percent

Gelkie Series

Map unit(s): 221
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: mountainsides
Position on landform: backslopes
Parent material: colluvium derived from basalt and sandstone
Elevation: 7,000 to 8,600 feet (2,134 to 2,621 meters)
Slope: 25 to 45 percent

Climatic data:
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Frost-free period: 50 to 75 days

Taxonomic class: Fine-loamy, mixed Argic Cryoborolls

Typical Pedon

Map unit in which located: Youga-Gelkie-Clayburn, warm, complex, 25 to 45 percent slopes, extremely bouldery
Location in the survey area: about 1,700 feet east and 1,400 feet south of the northwest corner of sec. 35, T. 12 N., R. 89 W.

A—0 to 2 inches; brown (10YR 4/3) very bouldery fine sandy loam, dark brown (10YR 3/3) moist; weak fine granular structure; soft, very friable, slightly sticky and slightly plastic; 15 percent gravel, 10 percent cobbles, 10 percent stones, 5 percent boulders; neutral; clear smooth boundary.
BAt—2 to 10 inches; brown (10YR 4/3) bouldery sandy clay loam, dark brown (10YR 3/3) moist; moderate fine subangular blocky structure; hard, friable, sticky and plastic; few distinct clay films on faces of peds; 5 percent gravel, 5 percent cobbles, 10 percent stones, 5 percent boulders; neutral; gradual smooth boundary.
Bt—10 to 22 inches; pale brown (10YR 6/3) sandy clay loam, brown (10YR 4/3) moist; moderate medium subangular blocky structure; hard, friable, sticky and plastic; few distinct clay films on faces of peds; mildly alkaline; clear smooth boundary.
Bk1—22 to 50 inches; white (2.5Y 8/2) sandy clay loam, light brownish gray (2.5Y 6/2) moist; weak medium subangular blocky structure; hard, friable, sticky and plastic; common fine concentrations of calcium carbonate; violently effervescent, moderately alkaline; clear smooth boundary.
Bk2—50 to 60 inches; white (2.5Y 8/2) fine sandy loam, light gray (2.5Y 7/2) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few fine concentrations of calcium carbonate; violently effervescent, moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 5 to 15 percent
Depth to argillic horizon: 20 to 30 inches
Depth to secondary calcium carbonate: 20 to 30 inches
Thickness of the mollic epipedon: 7 to 10 inches

Bt horizon:
Hue: 10YR or 7.5YR

Bk horizon:
Hue: 10YR or 2.5Y
Texture: sandy clay loam or fine sandy loam

Gerst Series

Map unit(s): 259
Depth class: very shallow to shallow
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: hills
Parent material: slope alluvium over residuum derived from shale and sandstone
Elevation: 5,400 to 5,800 feet (1,646 to 1,768 meters)
Slope: 4 to 40 percent
Climatic data:
Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Frost-free period: 110 to 140 days

Taxonomic class: Loamy, mixed, superactive, calcareous, mesic, shallow Ustic Torriorthents

Typical Pedon

Map unit in which located: Gerst parachannery loam, 4 to 25 percent slopes, from the Uintah Area, Utah Soil Survey
Location in the Uintah Area, Utah survey area: about 20 miles southwest of Ouray; 1,200 feet north and 100 feet west of the southeast corner of sec. 12, T. 13 S., R. 18 E., SLBM; Dog Knoll, Utah USGS quadrangle; latitude 39 degrees, 41 minutes, 46 seconds north and longitude 109 degrees, 50 minutes, 31 seconds west; NAD 27.

The soil surface is covered by 45 percent angular parachanners and 10 percent channers.

A—0 to 5 inches; very pale brown (10YR 7/3) parachannery loam, pale brown (10YR 6/3) moist; weak very fine, fine and medium subangular blocky structure; slightly hard, very friable, slightly sticky, and slightly plastic; common fine, very fine, few medium roots; many fine and very fine, common medium pores; 15 percent parachanners and 5 percent channers; slightly effervescent; 13 percent calcium

carbonate equivalent) calcium carbonate is disseminated; moderately alkaline (pH 8.2); abrupt smooth boundary.
C1—5 to 9 inches; pale brown (10YR 6/3) parachannery loam, brown (10YR 5/3) moist; moderate very thin and thin platy geogenic structure; slightly hard, very friable, slightly sticky and slightly plastic; common fine and very fine, few medium roots; common very fine and fine pores; 20 percent parachanners and 10 percent channers; strongly effervescent; 35 percent calcium carbonate equivalent) calcium carbonate is disseminated; moderately alkaline (pH 8.2); clear smooth boundary.
C2—9 to 13 inches; pale brown (10YR 6/3) parachannery loam; brown (10YR 5/3) moist; weak thick and medium platy geogenic structure; hard, friable, slightly sticky and slightly plastic; common fine and very fine roots; 15 percent parachanners and 10 percent channers; strongly effervescent; 33 percent calcium carbonate equivalent) calcium carbonate is disseminated; moderately alkaline (pH 8.4); clear smooth boundary.
Cr—13 inches; weathered shale.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 18 to 27 percent
Pararock fragment content: 15 to 35 percent
Depth to paralithic contact: 6 to 20 inches to weathered shale
Gypsum content: 0 to 1 percent
Mean annual soil temperature: 47 to 52 degrees F.
Moisture control section: is affected by precipitation that falls evenly throughout the year with a slight increase in the late summer and fall
Moisture regime: aridic bordering on ustic

A horizon:
Hue: 10YR to 5Y
Value: 5 to 7 dry, 3 to 6 moist
Chroma: 2 to 4 dry or moist
Texture: parachannery loam or loam
Rock fragment content: 15 to 20 percent parachanners and 5 to 14 percent channers
Reaction: moderately alkaline or strongly alkaline

C horizon:
Hue: 10YR to 5Y
Value: 5 to 7 dry, 4 to 6 moist
Chroma: 1 to 4 dry or moist
Texture: parachannery loam, parachannery clay loam, or parachannery silt loam
Rock fragment content: 15 to 35 percent parachanners and 5 to 15 percent channers
Reaction: moderately alkaline or strongly alkaline

Giarch Series

Map unit(s): 85
Depth class: very deep
Drainage class: moderately well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Landform: terraces
Parent material: alluvium derived from mixed sources
Elevation: 6,000 to 6,400 feet (1,829 to 1,951 meters)
Slope: 0 to 3 percent
Climatic data:
Mean annual precipitation: 11 to 15 inches (279 to 381 millimeters)
Mean annual air temperature: 43 to 45 degrees F. (6.1 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine, montmorillonitic Borollic Natrargids

Typical Pedon

Map unit in which located: Giarch fine sandy loam, 0 to 3 percent slopes
Location in the survey area: about 1,500 feet east and 1,100 feet north of the southwest corner of sec. 28, T. 7 N., R. 95 W.

E—0 to 2 inches; very pale brown (10YR 7/3) fine sandy loam, yellowish brown (10YR 5/4) moist; moderate thick platy structure parting to moderate thin platy; soft, very friable, very sticky and very plastic; moderately alkaline; abrupt smooth boundary.
Btn1—2 to 7 inches; yellowish brown (10YR 5/4) clay loam, dark yellowish brown (10YR 4/4) moist; moderate coarse columnar structure parting to moderate fine subangular blocky; hard, firm, sticky and plastic; common distinct clay films on faces of peds and along interstitial pores; slightly effervescent; very strongly alkaline; clear smooth boundary.
Btn2—7 to 18 inches; light yellowish brown (10YR 6/4) clay loam, yellowish brown (10YR 5/4) moist; moderate coarse subangular blocky structure parting to moderate medium subangular blocky; hard, firm, sticky and plastic; few faint clay films on faces of peds; strongly effervescent; very strongly alkaline; clear smooth boundary.
Bkn—18 to 25 inches; very pale brown (10YR 7/4) loam, light yellowish brown (10YR 6/4) moist;

moderate coarse subangular blocky structure; hard, friable, sticky and plastic; few fine filaments of calcium carbonate; violently effervescent; very strongly alkaline; gradual smooth boundary.

Cn1—25 to 50 inches; very pale brown (10YR 7/4) sandy clay loam containing 10 percent thin strata of sandy loam, light yellowish brown (10YR 6/4) moist; massive; hard, friable, sticky and plastic; strongly effervescent; very strongly alkaline; gradual smooth boundary.

Cn2—50 to 58 inches; light yellowish brown (10YR 6/4) clay loam; yellowish brown (10YR 5/4) moist; common fine distinct strongly brown (7.5YR 5/8) mottles; massive; hard, firm, sticky and plastic; strongly effervescent; very strongly alkaline; abrupt smooth boundary.

Cn3—58 to 62 inches; pale yellow (2.5Y 7/4) sand, light yellowish brown (2.5Y 6/4) moist; single grained; loose, nonsticky and nonplastic; slightly effervescent; very strongly alkaline.

Range in Characteristics

Depth to argillic horizon: 10 to 20 inches
Depth to effervescence: 1 inch to 10 inches

E horizon:
Reaction: moderately alkaline or strongly alkaline

Btn horizons:
Hue: 10YR or 7.5YR
Texture: clay loam or clay

Bkn horizons:
Texture: sandy clay loam, loam, or clay loam

Cn1 and Cn2 horizons:
Texture: sandy clay loam, loam, or clay loam. These horizons commonly are stratified. Thin strata of sandy loam may also be present.
Reaction: strongly alkaline or very strongly alkaline

Cn3 horizon (when present):
Hue: 10YR or 2.5Y
Texture: sand, loamy sand, or sandy loam
Reaction: strongly alkaline or very strongly alkaline

Gilston Series

Map unit(s): 270
Depth class: very deep
Drainage class: well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: drainageways
Parent material: alluvium derived from sandstone
Elevation: 5,300 to 5,900 feet (1,615 to 1,798 meters)
Slope: 2 to 8 percent
Climatic data:
Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Frost-free period: 110 to 140 days

Taxonomic class: Coarse-loamy, mixed, superactive, mesic Sodic Ustic Haplocambids

Typical Pedon

Map unit in which located: Walknolls-Gilston association, 2 to 25 percent slopes, from the Uintah Area, Utah Soil Survey
Location in the Uintah Area, Utah survey area: about 2 1/2 miles southeast of Bonanza, Utah; 1,000 feet west and 1,300 feet north of the southeast corner of sec. 30, T. 9 S., R. 25 E., SLBM; Bonanza, Utah USGS quadrangle; latitude 40 degrees, 00 minutes, 09 seconds north and longitude 109 degrees, 08 minutes, 15 seconds west; NAD 27.

A—0 to 4 inches; pale brown (10YR 6/3) sandy loam, dark brown (10YR 3/3) moist; weak thin platy structure parting to weak fine granular; slightly hard, friable; common fine and very fine roots; many very fine and fine and few medium tubular pores; 10 percent gravel; slightly effervescent; 4 percent calcium carbonate equivalent; calcium carbonate is disseminated; moderately alkaline (pH 8.0); clear wavy boundary.

Bw—4 to 10 inches; pale brown (10YR 6/3) gravelly sandy loam, dark brown (10YR 3/3) moist; weak medium subangular blocky structure parting to weak fine granular; slightly hard, friable, slightly plastic; many fine and very fine, common medium and few coarse roots; common fine and very fine tubular pores; 15 percent gravel; slightly effervescent; 4 percent calcium carbonate equivalent; calcium carbonate is disseminated; moderately alkaline (pH 8.0); gradual wavy boundary.

Bk1—10 to 21 inches; pale brown (10YR 6/3) gravelly sandy loam, dark brown (10YR 4/3) moist; massive; slightly hard, friable; many fine and very fine and few medium and coarse roots; common fine and very fine and few medium tubular pores; 15 percent gravel; slightly effervescent; 5 percent calcium carbonate equivalent; calcium carbonate is disseminated and segregated as less than 1 mm thick coatings

on undersides of gravel; moderately alkaline (pH 8.0); gradual wavy boundary.

Bk2—21 to 31 inches; light yellowish brown (10YR 6/4) gravelly sandy loam, dark yellowish brown (10YR 4/4) moist; massive; soft, very friable; many fine and very fine and few medium and coarse roots; few fine and very fine tubular pores; 20 percent gravel; slightly effervescent; 7 percent calcium carbonate equivalent; calcium carbonate is disseminated and segregated as veins and 1 mm thick coatings on undersides of gravel; moderately alkaline (pH 8.2); clear wavy boundary.

Bkn—31 to 52 inches; pale brown (10YR 6/3) gravelly sandy loam, dark brown (10YR 4/3) moist; massive; hard, friable; few fine and very fine roots; 15 percent gravel and 5 percent channers; slightly effervescent; 5 percent calcium carbonate equivalent; calcium carbonate is disseminated, and segregated as veins and 1 mm thick coatings on undersides of gravel; 21 percent exchangeable sodium; strongly alkaline (pH 9.0); clear smooth boundary.

Bkny—52 to 68 inches; very pale brown (10YR 7/3) gypsiferous loam, yellowish brown (10YR 5/4) moist; massive; very hard, friable, slightly sticky, and slightly plastic; few fine and very fine roots; many very fine and fine tubular pores; few fine masses of gypsum throughout peds (37 percent gypsum); strongly effervescent; 16 percent calcium carbonate equivalent; calcium carbonate is disseminated and segregated as common fine masses; 53 percent exchangeable sodium; very strongly alkaline (pH 9.2); clear wavy boundary.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 6 to 18 percent
Rock fragment content: 15 to 34 percent sandstone
Depth to cambic horizon: 2 to 5 inches
Depth to gypsic horizon: 40 to 55 inches
Mean annual soil temperature: 47 to 51 degrees F.
Moisture control section: is affected by precipitation that falls evenly throughout the year with a slight increase in late summer and early fall
Moisture regime: aridic bordering on ustic

A horizon:
Hue: 10YR
Value: 5 or 6 dry, 3 or 4 moist
Chroma: 3 or 4 dry or moist
Texture: sandy loam
Rock fragment content: 0 to 14 percent gravel
Calcium carbonate equivalent: 1 to 10 percent
Electrical conductivity (mmhos/cm): 0 to 2
Reaction: moderately alkaline

Bw horizon:
Hue: 10YR
Value: 5 or 6 dry, and 3 through 5 moist
Chroma: 3 or 4 dry or moist
Texture: gravelly sandy loam, gravelly fine sandy loam, fine sandy loam, or sandy loam
Rock fragment content: 5 to 34 percent gravel and 0 to 5 percent cobbles
Calcium carbonate equivalent: 1 to 10 percent
Electrical conductivity (mmhos/cm): 0 to 2
Sodium absorption ratio: 5 to 13
Reaction: moderately alkaline or strongly alkaline

Bk and Bkn horizons:
Hue: 10YR or 2.5Y
Value: 5 to 7 dry, 4 or 5 moist
Chroma: 2 to 4 dry or moist
Texture: gravelly sandy loam or gravelly fine sandy loam
Rock fragment content: 15 to 34 percent gravel and 0 to 5 percent cobbles
Calcium carbonate equivalent: 1 to 10 percent
Electrical conductivity (mmhos/cm): 0 to 2
Sodium absorption ratio: 5 to 13
Reaction: moderately alkaline or strongly alkaline

Bkny horizon:
Hue: 10YR or 2.5Y
Value: 6 or 7 dry, 4 or 5 moist
Chroma: 2 to 4 dry or moist
Texture: gypsiferous loam, gypsiferous sandy loam, gypsiferous fine sandy loam, gypsiferous loamy sand, gypsiferous silt loam, or gravelly sandy loam
Rock fragment content: 0 to 20 percent gravel and cobbles
Calcium carbonate equivalent: 10 to 20 percent
Electrical conductivity (mmhos/cm): 4 to 16
Sodium absorption ratio: 30 to 55
Exchangeable sodium percentage: greater than 15
Gypsum: 5 to 40 percent
Reaction: moderately alkaline to very strongly alkaline

Gompers Series

Map unit(s): 262
Depth class: very shallow to shallow
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)

Landform: hills
Parent material: slope alluvium over residuum derived from shale
Elevation: 6,500 to 7,200 feet (1,981 to 2,195 meters)
Slope: 4 to 25 percent
Climatic data:
Mean annual precipitation: 12 to 16 inches (305 to 406 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 90 to 110 days

Taxonomic class: Loamy-skeletal, mixed, superactive, calcareous, frigid Aridic Lithic Ustorthents

Typical Pedon

Map unit in which located: Gompers very channery silt loam, 4 to 25 percent slopes, from the Uintah Area, Utah Soil Survey
Location in the Uintah Area, Utah survey area: about 2 miles southeast of Geokenetics oil shale project; about 2,100 feet west and 3,800 feet south of the northeast corner of sec. 6, T. 14 S., R. 23 E., SLBM; Bates Knolls, Utah USGS quadrangle; latitude 39 degrees, 37 minutes, 32 seconds north and longitude 109 degrees, 22 minutes, 59 seconds west; NAD 27.

The soil surface is covered by 45 percent channers and 5 percent flagstones.

A—0 to 3 inches; brown (10YR 5/3) very channery silt loam, dark yellowish brown (10YR 3/4) moist; moderate thin platy structure parting to moderate very fine subangular blocky; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine, few medium roots; common very fine and fine, few medium vesicular pores; 25 percent channers; slightly effervescent; 24 percent calcium carbonate equivalent; calcium carbonate is disseminated; moderately alkaline (pH 8.2); clear smooth boundary.
C1—3 to 8 inches; pale brown (10YR 6/3) very channery loam, brown (10YR 5/3) moist; weak very fine and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine, few medium roots; common very fine, fine, and medium tubular pores; 35 percent channers and 5 percent flagstones; slightly effervescent; 28 percent calcium carbonate equivalent; calcium carbonate is disseminated; moderately alkaline (pH 8.4); clear wavy boundary.
C2—8 to 18 inches; pale yellow (2.5Y 7/4) extremely channery loam, dark yellowish brown (10YR 4/4) moist; massive; soft, friable, slightly sticky and slightly plastic; few very fine and fine, common medium roots; few very fine and fine tubular pores; 70 percent channers and 5 percent flagstones; slightly effervescent; 30 percent calcium carbonate equivalent; calcium carbonate is disseminated; strongly alkaline (pH 8.6); clear wavy boundary.
R—18 inches; unweathered shale bedrock.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 8 to 18 percent
Rock fragment content: 35 to 80 percent, primarily channers and flagstones from shale and sandstone lithology
Depth to lithic contact: 5 to 20 inches to shale or sandstone bedrock
Mean annual soil temperature: 44 to 47 degrees F.
Moisture control section: is affected by precipitation that is evenly distributed throughout the year with a slight increase in late summer and fall
Moisture regime: ustic bordering on aridic

A horizon:
Hue: 10YR
Value: 5 to 7 dry, 3 to 5 moist
Chroma: 2 to 4 dry or moist
Texture: very channery silt loam
Rock fragment content: 35 to 59 percent channers
Calcium carbonate equivalent: 15 to 30 percent
Reaction: moderately alkaline

C horizon:
Hue: 10YR or 2.5Y
Value: 5 to 7 dry, 4 to 6 moist
Chroma: 2 to 4 dry or moist
Texture: extremely channery loam, very channery loam, or extremely channery sandy loam
Rock fragment content: 35 to 70 percent channers and flagstones in horizontal beds of shale and sandstone that have soil material between the rock fragments and in cracks
Calcium carbonate equivalent: 15 to 30 percent
Reaction: moderately alkaline or strongly alkaline

Gothic Series

Map unit(s): 40, 41
Depth class: very deep
Drainage class: well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Landform: mountainsides
Parent material: colluvium derived from shale
Elevation: 7,200 to 8,200 feet (2,195 to 2,499 meters)

Slope: 15 to 45 percent
Climatic data:
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Frost-free period: 50 to 75 days

Taxonomic class: Fine, montmorillonitic Argic Cryoborolls

Typical Pedon

Map unit in which located: Cochetopa-Gothic complex, 10 to 25 percent slopes, extremely bouldery
Location in the survey area: about 400 feet east and 1,800 feet south of the northwest corner of sec. 29, T. 9 N., R. 89 W.

A1—0 to 6 inches; very dark grayish brown (10YR 3/2) very bouldery loam, very dark brown (10YR 2/2) moist; weak fine granular structure; soft, very friable, sticky and plastic; 10 percent gravel, 15 percent cobbles, 15 percent stones, 15 percent boulders; neutral; clear smooth boundary.
A2—6 to 12 inches; very dark grayish brown (10YR 3/2) very bouldery loam, very dark brown (10YR 2/2) moist; weak coarse subangular blocky structure parting to weak medium granular; soft, very friable, sticky and plastic; 10 percent gravel, 15 percent cobbles, 15 percent stones, 15 percent boulders; neutral; abrupt wavy boundary.
Bt1—12 to 17 inches; yellowish brown (10YR 5/4) cobbly clay loam, dark yellowish brown (10YR 4/4) moist; strong coarse subangular blocky structure parting to strong medium subangular blocky; very hard, firm, very sticky and very plastic; common distinct clay films on faces of peds and along interstitial pores; 10 percent gravel, 15 percent cobbles, 5 percent stones; neutral; clear smooth boundary.
Bt2—17 to 25 inches; light yellowish brown (10YR 6/4) clay, yellowish brown (10YR 5/4) moist; strong coarse subangular blocky structure parting to strong medium subangular blocky; very hard, firm, very sticky and very plastic; common distinct clay films on faces of peds and along interstitial pores; 10 percent gravel, 4 percent cobbles; slightly acid; gradual smooth boundary.
BCt—25 to 42 inches; brownish yellow (10YR 6/6) clay, yellowish brown (10YR 5/6) moist; moderate coarse subangular blocky structure parting to moderate medium subangular blocky; very hard, firm, very sticky and very plastic; common distinct clay films on faces of peds and along interstitial pores; 10 percent gravel, 4 percent cobbles; neutral; gradual smooth boundary.
C—42 to 60 inches; pale yellow (2.5Y 7/4) gravelly clay, light yellowish brown (2.5Y 6/4) moist; weak medium subangular blocky structure; very hard, firm, very sticky and very plastic; 15 percent gravel, 10 percent cobbles; neutral.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 5 to 30 percent; less than 10 inches in diameter
Depth to argillic horizon: 40 to 60 inches
Thickness of the mollic epipedon: 10 to 15 inches

Bt horizon:
Hue: 7.5YR or 10YR

C horizon:
Hue: 7.5YR through 2.5Y
Texture: clay or gravelly clay

Gracot Series

Map unit(s): 86
Depth class: very deep
Drainage class: excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Landform: breaks, hills
Parent material: fluvial deposits over residuum derived from fine grained sandstone
Elevation: 6,000 to 6,800 feet (1,829 to 2,073 meters)
Slope: 5 to 30 percent
Climatic data:
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Sandy, mixed, frigid Ustic Torriorthents

Typical Pedon

Map unit in which located: Gracot-Maybell complex, 5 to 30 percent slopes
Location in the survey area: about 2,600 feet east and 1,800 feet north of the southwest corner of sec. 5, T. 5 N., R. 95 W.

A—0 to 5 inches; brown (10YR 5/3) very gravelly loamy sand, brown (10YR 4/3) moist; single grained, loose, nonsticky and nonplastic; 45 percent gravel, 15 percent cobbles; strongly effervescent; moderately alkaline; gradual wavy boundary.

C—5 to 16 inches; pale brown (10YR 6/3) extremely gravelly loamy sand; dark yellowish brown (10YR 4/4) moist; single grained; loose, nonsticky and nonplastic; 60 percent gravel, 15 percent cobbles; strongly effervescent; moderately alkaline; abrupt wavy boundary.
2C—16 to 60 inches; light gray (10YR 7/2) fine sand, grayish brown (10YR 5/2) moist; single grained; loose, nonsticky and nonplastic; strongly effervescent; mildly alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 15 to 35 percent
Depth to effervescence: surface; some pedons may be noneffervescent in some pedons
Hue: 10YR or 2.5Y

A horizon:
Reaction: mildly alkaline or moderately alkaline

C horizon:
Texture: extremely gravelly loamy sand, very gravelly loamy sand, extremely gravelly sand, or very gravelly sand
Rock fragment content: 45 to 75 percent
Reaction: mildly alkaline or moderately alkaline

2C horizon:
Depth to the 2C horizon: 15 to 30 inches
Texture: fine sand or sand
Reaction: mildly alkaline or moderately alkaline

Grapit Series

Map unit(s): 48, 111, 224, 230
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: hills, less steep convex areas on mountainsides, valleys
Position on landform: backslopes, footslopes
Parent material: colluvium derived from conglomerate, colluvium derived from limestone, slope alluvium and/or colluvium derived from limestone
Elevation: 6,200 to 8,500 feet (1,890 to 2,591 meters)
Slope: 12 to 75 percent
Climatic data:
Mean annual precipitation: 12 to 16 inches (305 to 406 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days
Taxonomic class: Loamy-skeletal, carbonatic Aridic Calciborolls

Typical Pedon

Map unit in which located: Crago-Pensore-Grapit association, 6 to 75 percent slopes, very stony
Location in the survey area: about 2,000 feet south and 500 feet west of the northeast corner of sec. 25, T. 7 N., R. 102 W.

A1—0 to 3 inches; brown (7.5YR 4/2) channery loam, very dark grayish brown (7.5YR 3/2) moist; moderate very fine granular structure; loose, very friable, slightly sticky and slightly plastic; 20 percent gravel, 10 percent cobbles, 3 percent stones; slightly effervescent; moderately alkaline; abrupt wavy boundary.
A2—3 to 12 inches; brown (7.5YR 5/2) very channery loam, very dark grayish brown (7.5YR 3/2) moist; weak fine and medium subangular blocky structure; soft, friable, slightly sticky and slightly plastic, 35 percent channers, 5 percent flagstones; 14 percent calcium carbonate equivalent; strongly effervescent; moderately alkaline; clear wavy boundary.
Bw—12 to 19 inches; pinkish gray (7.5YR 6/2) very channery clay loam, brown (7.5YR 5/4) moist; moderate fine and medium subangular blocky structure; soft, friable, slightly sticky and slightly plastic; 35 percent channers, 5 percent flagstones; 25 percent calcium carbonate equivalent; violently effervescent; moderately alkaline; clear wavy boundary.
Bk1—19 to 26 inches; pinkish gray (5YR 7/2) very channery clay loam, light brown (7.5YR 6/4) moist; moderate medium subangular blocky structure; slightly hard, firm, slightly sticky and plastic; 45 percent channers, 5 percent flagstones; 45 percent calcium carbonate equivalent; violently effervescent; moderately alkaline; clear wavy boundary.
Bk2—26 to 38 inches; white (5YR 8/1) very channery loam, pinkish gray (7.5YR 7/2) moist; weak fine subangular blocky structure; slightly hard, firm, slightly sticky and slightly plastic; 40 percent channers, 10 percent flagstones; 65 percent calcium carbonate equivalent; violently effervescent; moderately alkaline; gradual wavy boundary.
Bk3—38 to 50 inches; pink (5YR 7/3) very channery clay loam, light brown (7.5YR 6/4) moist; massive; soft, friable, slightly sticky and slightly plastic; 30 percent channers, 10 percent flagstones; 30 percent calcium carbonate

equivalent; violently effervescent; moderately alkaline; gradual wavy boundary.
Bk4—50 to 60 inches; light reddish brown (5YR 6/3) very channery clay loam, brown (7.5YR 5/4) moist; massive; slightly hard, firm, slightly sticky and slightly plastic; 30 percent channers, 10 percent flagstones; 30 percent calcium carbonate equivalent; violently effervescent; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 20 to 30 percent
Rock fragment content: 35 to 65 percent
Calcium carbonate equivalent: 40 to 50 percent
Depth to secondary calcium carbonate: 11 to 25 inches
Note: The Grapit soil in the map unit #111 of Kemmerer-Grapit complex, 15 to 65 percent slopes is outside the range of the Grapit series because it has a hue of 10YR in all horizons.

A horizon:
Texture: channery loam or very channery loam

Bw horizon:
Texture: channery loam, channery clay loam, very channery loam, or very gravelly clay loam

Bk1 and Bk2 horizons:
Hue: 7.5YR or 5YR
Texture: very channery loam, very channery clay loam, very gravelly clay loam, or very gravelly sandy clay loam
Reaction: moderately alkaline or strongly alkaline

Bk3 and Bk4 horizons:
Hue: 7.5YR or 5YR
Texture: very gravelly sandy clay loam, extremely gravelly sandy clay loam, extremely channery loam, or very channery clay loam
Reaction: moderately alkaline or strongly alkaline

Green River Series

Map unit(s): 231
Depth class: very deep
Drainage class: moderately well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: upper flood plains
Parent material: alluvium
Elevation: 4,700 to 5,800 feet (1,433 to 1,768 meters)
Slope: 0 to 2 percent
Climatic data:
Mean annual precipitation: 5 to 12 inches (127 to 305 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Frost-free period: 110 to 140 days

Taxonomic class: Coarse-loamy, mixed, superactive, calcareous, mesic Oxyaquic Torrifluvents

Typical Pedon

Map unit in which located: Green River-Fluvaquents complex, 0 to 2 percent slopes, from the Dinosaur National Monument Soil Survey
Location in the Dinosaur National Monument survey area: about 600 feet west and 2,300 feet north of the southeast corner of section 32, T. 3 S., R. 25 E., SLBM latitude 40 degrees, 30 minutes, 54 seconds N. and longitude 109 degrees, 7 minutes, 40 seconds W.

A—0 to 5 inches; brown (10YR 5/3) fine sandy loam, dark brown (10YR 3/3) moist; weak fine subangular blocky structure; soft, very friable, nonsticky and nonplastic; many very fine, common fine, few medium roots; common very fine and fine, few medium tubular pores; calcium carbonate is disseminated; very slightly effervescent; few fine distinct brownish yellow (10YR 6/6) redoximorphic concentrations; moderately alkaline; clear smooth boundary.
C1—5 to 13 inches; pale brown (10YR 6/3) loamy very fine sand, brown (10YR 4/3) moist; massive; soft, very friable, nonsticky and nonplastic; common very fine, few fine and medium roots; common very fine and fine tubular pores; calcium carbonate is disseminated; slightly effervescent; few fine distinct brownish yellow (10YR 6/6) redoximorphic concentrations; strongly alkaline; abrupt wavy boundary.
C2—13 to 19 inches; pale brown (10YR 6/3) loamy fine sand, brown (10YR 5/3) moist; massive; soft, very friable, nonsticky and nonplastic; common very fine, few fine and medium roots; common very fine, few fine tubular pores; calcium carbonate is disseminated; very slightly effervescent; few fine distinct brownish yellow (10YR 6/6) redoximorphic concentrations; moderately alkaline; clear wavy boundary.
C3—19 to 30 inches; light olive brown (2.5Y 5/3) very fine sandy loam, olive brown (2.5Y 4/3) moist; massive; soft, very friable, slightly sticky and nonplastic; few very fine, fine, and medium roots; few very fine and fine tubular pores; calcium carbonate is disseminated; slightly effervescent; common fine prominent brownish yellow (10YR 6/6) redoximorphic concentrations; strongly alkaline; clear wavy boundary.

C4—30 to 41 inches; pale brown (10YR 6/3) fine sandy loam, brown (10YR 5/3) moist; massive; soft, very friable, nonsticky and nonplastic; few very fine, fine, and medium roots; few very fine and fine tubular pores; calcium carbonate is disseminated; very slightly effervescent; common fine distinct brownish yellow (10YR 6/6) redoximorphic concentrations; moderately alkaline; abrupt irregular boundary.
C5—41 to 57 inches; light yellowish brown (10YR 6/4) stratified loamy fine sand to sand, brown (10YR 4/3) moist; massive; soft, very friable, nonsticky and nonplastic; few very fine, fine, and medium roots; common very fine, few fine interstitial and tubular pores; calcium carbonate is disseminated; very slightly effervescent; few fine distinct dark yellowish brown (10YR 4/6) redoximorphic concentrations; moderately alkaline; abrupt wavy boundary.
C6—57 to 60 inches; pale brown (10YR 6/3) loam, brown (10YR 5/3) moist; massive; hard, friable, slightly sticky and slightly plastic; few very fine and fine roots; many very fine, common fine, few medium tubular pores; calcium carbonate is disseminated; slightly effervescent; few fine distinct dark yellowish brown (10YR 4/6) redoximorphic concentrations; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 5 to 18 percent
Depth to water table: 20 to 60 inches

A horizon:
Hue: 7.5YR to 2.5Y
Value: 4 to 6 dry, 3 to 5 moist
Chroma: 2 or 3
Texture: loam or fine sandy loam
Salinity: 2 to 16 millimhos per centimeters
Reaction: moderately alkaline or strongly alkaline

C horizon:
Hue: 7.5YR to 2.5Y
Value: 5 to 7 dry, 3 to 5 moist
Chroma: 2 to 6
Texture: stratified layers of loam to loamy fine sand (some pedons have thin layers of sand to silt modified by 0 to 40 percent gravel or cobbles below 40 inches)
Salinity: 4 to 16 millimhos per centimeter
Reaction: moderately alkaline or strongly alkaline

Gretdivid Series

Map unit(s): 15, 87, 107, 131
Depth class: very deep
Drainage class: well drained, somewhat excessively drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: hills, hillslopes
Position on landform: summits, shoulders, backslopes
Parent material: residuum derived from sandstone
Elevation: 6,200 to 7,300 feet (1,890 to 2,225 meters)
Slope: 10 to 30 percent
Climatic data:
Mean annual precipitation: 11 to 15 inches (279 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine-loamy over sandy or sandy-skeletal, mixed Borollic Haplargids

Typical Pedon

Map unit in which located: Gretdivid-Taffom-Abor complex, 10 to 30 percent slopes
Location in the survey area: about 1,850 feet east and 50 feet north of the southwest corner of sec. 22, T. 9 N., R. 94 W.

A—0 to 3 inches; dark grayish brown (10YR 4/2) loamy coarse sand, very dark grayish brown (10YR 3/2) moist; weak fine granular structure; soft, very friable, nonsticky and nonplastic; neutral; abrupt smooth boundary.
Bt—3 to 7 inches; dark yellowish brown (10YR 4/4) sandy clay loam, dark yellowish brown (10YR 3/4) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; soft, friable, slightly sticky and slightly plastic; common faint clay films on faces of peds and bridging sand grains; neutral; clear smooth boundary.
2BC—7 to 12 inches; light yellowish brown (10YR 6/4) loamy coarse sand, yellowish brown (10YR 5/4) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; mildly alkaline; clear smooth boundary.
2C1—12 to 52 inches; very pale brown (10YR 7/3) coarse sand, light yellowish brown (10YR 6/4) moist; single grained; loose, nonsticky and

nonplastic; mildly alkaline; gradual smooth boundary.
2C2—52 to 60 inches; yellow (10YR 7/6) gravelly coarse sand, brownish yellow (10YR 6/6) moist; single grained; loose, nonsticky and nonplastic; 15 percent gravel; mildly alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 0 to 15 percent
Depth to argillic horizon: 5 to 10 inches

A horizon:
Hue: 10YR or 7.5YR
Texture: loamy sand or loamy coarse sand
Reaction: neutral or mildly alkaline

Bt horizon:
Hue: 10YR or 7.5YR
Texture: sandy clay loam or sandy loam
Clay content: 15 to 27 percent
Reaction: neutral or mildly alkaline

2C horizon:
Hue: 10YR or 2.5Y
Texture: loamy sand, sand, coarse sand, or gravelly coarse sand
Reaction: neutral or mildly alkaline

Grieves Series

Map unit(s): 88, 89, 90, 91
Depth class: very deep
Drainage class: somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: alluvial fans, hills
Position on landform: footslopes
Parent material: alluvium and residuum derived from sandstone, alluvium derived from sandstone
Elevation: 5,800 to 7,200 feet (1,768 to 2,195 meters)
Slope: 1 to 30 percent
Climatic data:
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Coarse-loamy, mixed (calcareous), frigid Ustic Torriorthents

Typical Pedon

Map unit in which located: Grieves loamy fine sand, 1 to 12 percent slopes
Location in the survey area: about 1,500 feet south and 100 feet east of the northwest corner of sec. 15, T. 7 N., R. 93 W.

A—0 to 2 inches; light yellowish brown (2.5Y 6/4) loamy fine sand, olive brown (2.5Y 4/4) moist; weak fine granular structure; soft, very friable, nonsticky and nonplastic; strongly effervescent; mildly alkaline; abrupt smooth boundary.
AC—2 to 5 inches; light brownish gray (2.5Y 6/3) fine sandy loam, dark grayish brown (2.5Y 4/3) moist; weak medium subangular blocky structure; soft, very friable, slightly sticky and nonplastic; strongly effervescent; mildly alkaline; clear smooth boundary.
C1—5 to 18 inches; light brownish gray (2.5Y 6/3) fine sandy loam, dark grayish brown (2.5Y 4/3) moist; weak coarse subangular blocky structure; slightly hard, very friable, slightly sticky and nonplastic; strongly effervescent; moderately alkaline; gradual smooth boundary.
C2—18 to 30 inches; light brownish gray (2.5Y 6/3) fine sandy loam, dark grayish brown (2.5Y 4/3) moist; massive; soft, very friable, slightly sticky and nonplastic; 5 percent gravel; strongly effervescent; moderately alkaline; gradual smooth boundary.
C3—30 to 60 inches; pale yellow (2.5Y 7/4) fine sandy loam, light olive brown (2.5Y 5/4) moist; massive; soft, very friable, slightly sticky and nonplastic; 5 percent gravel; strongly effervescent; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 8 to 18 percent
Rock fragment content: 0 to 10 percent
Depth to effervescence: 0 to 5 inches
Hue: 10YR or 2.5Y

A horizon:
Reaction: mildly alkaline or moderately alkaline

C3 horizon:
Texture: fine sandy loam or sandy loam; in some pedons, texture is loamy fine sand below a depth of 30 inches

Grimm Series

Map unit(s): 92
Depth class: very deep
Drainage class: excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Landform: hills

Position on landform: shoulders, backslopes
Parent material: relict alluvium derived from mixed sources
Elevation: 6,200 to 7,500 feet (1,890 to 2,286 meters)
Slope: 15 to 45 percent
Climatic data:
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Sandy-skeletal, mixed, frigid Ustic Torriorthents

Typical Pedon

Map unit in which located: Grimm-Ustic Torriorthents, shallow, complex, 15 to 45 percent slopes
Location in the survey area: about 1,300 feet west and 700 feet south of the northeast corner of sec. 3, T. 10 N., R. 97 W.

A—0 to 4 inches; brown (10YR 5/3) extremely cobbly loamy sand, dark yellowish brown (10YR 4/4) moist; weak medium granular structure; soft, very friable, nonsticky and nonplastic; 30 percent gravel, 30 percent cobbles, 5 percent stones; strongly effervescent; moderately alkaline; clear smooth boundary.
Bk1—4 to 13 inches; pink (7.5YR 7/4) extremely cobbly loamy sand, light brown (7.5YR 6/4) moist; massive; soft, very friable, nonsticky and nonplastic; 30 percent gravel, 30 percent cobbles, 5 percent stones; pendants of calcium carbonate on rock fragments; common fine masses of calcium carbonate; strongly effervescent; moderately alkaline; abrupt wavy boundary.
Bk2—13 to 18 inches; light gray (10YR 7/2) sandy loam, light brownish gray (10YR 6/2) moist; massive; soft, very friable, slightly sticky and nonplastic; 10 percent gravel; pendants of calcium carbonate on rock fragments; common fine masses of calcium carbonate; strongly effervescent; moderately alkaline; abrupt wavy boundary.
Bk3—18 to 31 inches; pink (7.5YR 7/4) extremely cobbly sand; light brown (10YR 6/4) moist; single grained; loose, nonsticky and nonplastic; 30 percent gravel, 30 percent cobbles; 5 percent stones; pendants of calcium carbonate on rock fragments; strongly effervescent; moderately alkaline; abrupt wavy boundary.
Bk4—31 to 37 inches; pink (7.5YR 7/4) sand, light brown (7.5YR 6/4) moist; single grained; loose, nonsticky and nonplastic; 10 percent gravel; calcium carbonate pendants on rock fragments; strongly effervescent; moderately alkaline; abrupt wavy boundary.
Bk5—37 to 60 inches; pink (7.5YR 7/4) extremely cobbly sand, light brown (7.5YR 6/4) moist; single grained; loose, nonsticky and nonplastic; 30 percent gravel, 30 percent cobbles, 5 percent stones; pendants of calcium carbonate on rock fragments; strongly effervescent; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 40 to 60 percent
Depth to effervescence: 0 to 4 inches

Bk horizons:
Hue: 10YR or 7.5YR
Texture: very cobbly or extremely cobbly modifiers of sand or loamy sand; thin layers of sandy loam, loamy sand, or sand may be present at any depth

Grubrob Series

Map unit(s): 148
Depth class: moderately deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: concave and planar slopes on plateaus
Parent material: eolian deposits over interbedded conglomerate, sandstone, and limestone
Elevation: 7,500 to 8,000 feet (2,286 to 2,438 meters)
Slope: 1 to 6 percent
Climatic data:
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine-loamy, mixed Borollic Haplargids

Typical Pedon

Map unit in which located: Pilotpeak-Grubrob complex, 1 to 12 percent slopes
Location in the survey area: about 2,500 feet east and 2,500 feet north of the southwest corner of sec. 18, T. 12 N., R. 102 W.

A—0 to 3 inches; pale brown (10YR 6/3) fine sandy loam, brown (10YR 4/3) moist; moderate thin platy structure parting to moderate very fine granular; soft, very friable, slightly sticky and

nonplastic; 5 percent gravel; mildly alkaline; abrupt smooth boundary.
Bt1—3 to 9 inches; brown (7.5YR 5/4) sandy clay loam, dark brown (7.5YR 4/4) moist; moderate coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; very few faint clay films on faces of peds and bridging sand grains; 5 percent gravel; mildly alkaline; clear wavy boundary.
Bt2—9 to 18 inches; yellowish brown (10YR 5/4) sandy clay loam, dark yellowish brown (10YR 4/4) moist; moderate fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; very few faint clay films on faces of peds and bridging sand grains; 5 percent gravel; slightly effervescent; mildly alkaline; abrupt smooth boundary.
2Bk—18 to 28 inches; white (10YR 8/2) very gravelly fine sandy loam, very pale brown (10YR 7/4) moist; massive; soft, friable; sticky and nonplastic; 40 percent gravel; 25 percent calcium carbonate equivalent; violently effervescent; moderately alkaline; abrupt wavy boundary.
2R—28 inches; hard calcareous conglomerate.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 0 to 15 percent
Calcium carbonate equivalent: 15 to 30 percent
Depth to effervescence: 8 to 22 inches
Depth to lithic contact: 20 to 40 inches
Hue: 7.5YR or 10YR

Bt horizon:
Hue: 10YR or 7.5YR
Clay content: 20 to 25 percent
Texture: fine sandy loam, sandy clay loam, or loam

2Bk horizon:
Texture: fine sandy loam or loam with gravelly, very gravelly, channery, or very channery modifiers
Rock fragment content: 15 to 40 percent

Hackling Series

Map unit(s): 244
Depth class: shallow
Drainage class: well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: mountains
Position on landform: backslopes, footslopes
Parent material: calcareous colluvium and/or residuum weathered from limestone and sandstone
Elevation: 5,800 to 8,400 feet (1,768 to 2,560 meters)
Slope: 10 to 45 percent
Climatic data:
Mean annual precipitation: 12 to 15 inches (305 to 381 millimeters)
Mean annual air temperature: Unspecified
Frost-free period: 75 to 95 days

Taxonomic class: Loamy-skeletal, mixed, superactive, frigid Aridic Lithic Ustochrepts

Typical Pedon

Map unit in which located: Rock outcrop-Hackling complex, 10 to 45 percent slopes, very stony, from the Dinosaur National Monument Soil Survey
Location in the Dinosaur National Monument survey area: about 1,800 feet west and 500 feet south of the northeast corner of section 32, T. 9 N., R. 102 W., NMPM latitude 40 degrees, 42 minutes, 7 seconds N. and longitude 108 degrees, 52 minutes, 59 seconds W.

The soil surface is covered with limestone and sandstone rock fragments, consisting of 30 percent gravel, 15 percent cobbles, and 2 percent stones.

A—0 to 1 inch; dark reddish brown (2.5YR 4/3) gravelly sandy loam, dark reddish brown (2.5YR 3/3) moist, weak medium platy structure; soft, very friable, nonsticky and nonplastic; many very fine roots; few very fine vesicular pores; 20 percent gravel; calcium carbonate is disseminated; strongly effervescent; slightly alkaline; clear smooth boundary.
Bk1—1 inch to 4 inches; reddish brown (2.5YR 4/4) very gravelly sandy loam, dark reddish brown (2.5YR 3/4) moist, weak very fine subangular structure; slightly hard, friable, nonsticky and nonplastic; many fine and medium roots; few very fine vesicular pores; 35 percent gravel and 5 percent cobbles; calcium carbonate is disseminated; 3 percent calcium carbonate equivalent; strongly effervescent; slightly alkaline; clear smooth boundary.
Bk2—4 to 15 inches; reddish brown (2.5YR 5/3) extremely cobbly sandy loam, reddish brown (2.5YR 4/3) moist; weak fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many fine and medium, common coarse roots; few very fine vesicular pores; 40 percent gravel and 25 percent cobbles; 50 percent calcium carbonate coatings on rock fragments; calcium carbonate is disseminated;

16 percent calcium carbonate equivalent; violently effervescent; moderately alkaline; abrupt smooth boundary.
R—15 inches; Hard fractured calcareous sandstone.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 10 to 18 percent
Rock fragment content: 35 to 70 percent
Depth to bedrock: 10 to 20 inches

A horizon:
Hue: 2.5YR or 5YR
Value: 4 or 5 dry, 3 or 4 moist
Chroma: 2 to 4

Bk horizon:
Hue: 2.5YR or 5YR
Value: 4 to 6 dry, 3 to 5 moist
Chroma: 3 to 6
Texture: loam or sandy loam modified by 35 to 70 percent gravel or cobbles

Hanksville Series

Map unit(s): 263
Depth class: moderately deep
Drainage class: well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Landform: hills
Parent material: slope alluvium over residuum from shale
Elevation: 4,800 to 6,100 feet (1,463 to 1,859 meters)
Slope: 2 to 25 percent
Climatic data:
Mean annual precipitation: 5 to 8 inches (127 to 203 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Frost-free period: 110 to 140 days

Taxonomic class: Fine, mixed, active, calcareous, mesic Typic Torriorthents

Typical Pedon

Map unit in which located: Hanksville silty clay loam, 2 to 25 percent slopes, from the Uintah Area, Utah Soil Survey
Location in the Uintah Area, Utah survey area: about 1 1/2 miles east of the Uintah County Garbage Dump east of Vernal; about 800 feet south and 550 feet east of the northwest corner of sec. 22, T. 4 S., R. 22 E., SLBM; Naples, Utah USGS quadrangle; latitude 40 degrees, 27 minutes, 42 seconds north and longitude 109 degrees, 26 minutes, 24 seconds west; NAD 27.

A—0 to 3 inches; very pale brown (10YR 7/4) silty clay loam, light olive brown (2.5Y 5/4) moist; weak thin platy structure parting to moderate very fine subangular blocky; soft, firm, moderately sticky and moderately plastic; few medium, fine and very fine roots; many very fine interstitial pores; strongly effervescent; 19 percent calcium carbonate equivalent; calcium carbonate is disseminated; strongly alkaline (pH 8.6); clear smooth boundary.
Cy1—3 to 13 inches; very pale brown (10YR 7/3) silty clay, light olive brown (2.5Y 5/4) moist; weak coarse prismatic structure parting to weak medium and fine subangular blocky; hard, firm, moderately sticky and moderately plastic; few fine, common very fine roots; few fine, common very fine tubular pores; common medium pedogenic gypsum crystals and veins; strongly effervescent; 12 percent calcium carbonate equivalent; calcium carbonate is disseminated; moderately alkaline (pH 8.2); gradual smooth boundary.
Cy2—13 to 33 inches; pale brown (10YR 6/3) silty clay, olive brown (2.5Y 4/4) moist; weak coarse prismatic structure parting to medium and coarse subangular blocky; very hard, very firm, very sticky and very plastic; few fine and very fine roots; few fine and common very fine tubular pores; many coarse geogenic gypsum crystals; 40 percent pararock shale fragments; strongly effervescent; 19 percent calcium carbonate equivalent; calcium carbonate is disseminated; strongly alkaline (pH 9.0); clear wavy boundary.
Cr—33 inches; weathered shale.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 35 to 55 percent
Average annual soil temperature: 47 to 51 degrees F.
Depth to paralithic contact: 20 to 40 inches to shale bedrock
Moisture control section: is affected by precipitation that falls evenly throughout the year with a slight increase in late summer and early fall
Moisture regime: typic aridic

A horizon:
Hue: 10YR to 5Y
Value: 6 or 7 dry, 4 or 5 moist
Chroma: 2 to 4 dry or moist
Texture: silty clay loam

Calcium carbonate equivalent: 5 to 25 percent
Electrical conductivity (mmhos/cm): 2 to 8
Gypsum: 1 to 10 percent
Sodium adsorption ratio: 2 to 5
Reaction: moderately alkaline or strongly alkaline

Cy horizon:
Hue: 10YR to 5Y
Value: 6 or 7 dry, 4 or 5 moist
Chroma: 2 to 4
Texture: clay, silty clay, or silty clay loam
Calcium carbonate equivalent: 5 to 25 percent
Electrical conductivity (mmhos/cm): 2 to 16
Gypsum: 5 to 10 percent
Sodium adsorption ratio: 2 to 13
Reaction: moderately alkaline or strongly alkaline

C horizon:
Hue: 10YR to 5Y
Value: 5 to 7 dry, 3 to 5 moist
Chroma: 2 to 4
Texture: clay, silty clay, or silty clay loam
Pararock fragment content: 20 to 90 percent pararock shale fragments, which slake in water
Calcium carbonate equivalent: 5 to 25 percent
Electrical conductivity (mmhos/cm): 2 to 16
Gypsum: 5 to 10 percent
Sodium adsorption ratio: 2 to 13
Reaction: moderately alkaline or strongly alkaline

Haplaquolls

Map unit(s): 70
Local phase(s): frequently flooded
Depth class: very deep
Drainage class: very poorly drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: oxbows on flood plains, depressions on stream terraces
Parent material: alluvium derived from mixed sources
Elevation: 5,900 to 8,000 feet (1,798 to 2,438 meters)
Slope: 0 to 1 percent
Climatic data:
Mean annual precipitation: 11 to 18 inches (279 to 457 millimeters)
Mean annual air temperature: 40 to 45 degrees F. (4.4 to 7.2 degrees C.)
Frost-free period: 65 to 85 days

Taxonomic class: Haplaquolls

Typical Pedon

Map unit in which located: Fluvaquents and Haplaquolls soils, frequently flooded
Location in the survey area: about 1,750 feet east and 1,000 feet north of the south- west corner of sec. 5, T. 6 N., R. 90 W.

A1—0 to 6 inches; grayish brown (10YR 5/2) clay loam, very dark brown (10YR 2/2) moist; strong fine and medium granular structure; hard, friable, sticky and plastic; slightly effervescent, moderately alkaline; clear smooth boundary.
A2—6 to 14 inches; grayish brown (10YR 5/2) clay loam, very dark grayish brown (10YR 3/2) moist; strong medium granular structure; hard, friable, sticky and plastic; slightly effervescent, moderately alkaline; abrupt wavy boundary.
C—14 to 21 inches; light brownish gray (10YR 6/2) fine sandy loam, dark brown (10YR 4/3) moist; common medium distinct light gray (10YR 6/1) and yellowish brown (10YR 5/8) mottles; weak coarse granular structure; hard, friable, sticky and slightly plastic; mildly alkaline; clear wavy boundary.
Cg—21 to 34 inches; light gray (10YR 6/1) sandy clay loam, dark gray (10YR 4/1) moist; many medium distinct light gray (2.5Y N7/0) and strong brown (7.5YR 5/8) mottles; massive; hard, friable, sticky and plastic; mildly alkaline; abrupt smooth boundary.
2C1—34 to 44 inches; light gray (2.5Y 7/2) sand, light gray (2.5Y 7/2) moist; single grained; loose, nonsticky and nonplastic; mildly alkaline; clear smooth boundary.
2C2—44 to 60 inches; light gray (2.5Y 7/2) extremely gravelly sand, light gray (2.5Y 7/2) moist; single grained; loose, nonsticky and nonplastic; 60 percent gravel, 15 percent cobbles; mildly alkaline.

Range in Characteristics

Note: Some pedons are noneffervescent throughout. These soils are in the sandy-skeletal, coarse-loamy, fine-loamy, fine-loamy over sandy or sandy skeletal, fine, or clayey over sandy or sandy-skeletal particle-size families.
Depth to a water table: at or near the surface during the spring and early summer. In some areas the water table remains above a depth of 1 foot throughout the year while in other areas the water table is at a depth 1 foot to 3 feet during late summer, fall, and winter.
Thickness of the mollic epipedon: 7 to 22 inches

C horizon:
Hue: 10YR or 2.5Y
Reaction: mildly or moderately alkaline
Depth to the 2C horizon: 10 to 60 inches or more

Haploborolls

Map unit(s): 159
Depth class: very shallow to moderately deep
Drainage class: well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: hillslopes, plateaus
Parent material: colluvium and residuum derived from sandstone
Elevation: 6,800 to 8,000 feet (2,073 to 2,438 meters)
Slope: 10 to 40 percent
Climatic data:
Mean annual precipitation: 15 to 18 inches (381 to 457 millimeters)
Mean annual air temperature: 40 to 45 degrees F. (4.4 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Haploborolls

Typical Pedon

Map unit in which located: Rock outcrop-Haploborolls complex, 10 to 40 percent slopes
Location in the survey area: about 2,450 feet east and 900 feet south of the northwest corner of sec. 8, T. 7 N., R. 101 W.

A1—0 to 8 inches; dark reddish brown (5YR 3/3) gravelly sandy loam, dark reddish brown (5YR 3/2) moist; moderate medium granular structure; soft, very friable, nonsticky and nonplastic; 20 percent gravel, 10 percent cobbles; neutral; clear wavy boundary.
A2—8 to 13 inches; dark reddish brown (5YR 3/3) cobbly sandy loam, dark reddish brown (5YR 3/3) moist; weak medium subangular blocky structure; soft, very friable, slightly sticky and nonplastic; 20 percent gravel, 15 percent cobbles; neutral; clear irregular boundary.
Bw—13 to 22 inches; reddish brown (2.5YR 4/4) very cobbly sandy loam, dark reddish brown (2.5YR 3/4) moist; weak medium subangular blocky structure; soft, very friable, slightly sticky and nonplastic; 25 percent gravel, 20 percent cobbles; neutral; clear wavy boundary.
BC—22 to 24 inches; reddish brown (2.5YR 4/4) very cobbly sandy clay loam, red (2.5YR 4/6) moist; weak medium subangular blocky structure; slightly hard, friable, sticky and plastic; 25 percent gravel, 20 percent cobbles; neutral.
R—24 inches; Red sandstone bedrock.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 0 to 60 percent
Depth to lithic contact: 4 to 30 inches
Thickness of the mollic epipedon: 4 to 15 inches

Bw (if present) and C horizons:
Hue: 2.5YR to 7.5YR
Texture: sandy loam or sandy clay loam with or without cobbly or very cobbly modifiers
Reaction: neutral or mildly alkaline

Hapney Series

Map unit(s): 94
Local phase(s): moist
Depth class: very deep
Drainage class: moderately well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Landform: stream terraces
Parent material: alluvium derived from mixed sources
Elevation: 6,000 to 6,300 feet (1,829 to 1,920 meters)
Slope: 0 to 1 percent
Climatic data:
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine, montmorillonitic Aridic Natriborolls

Typical Pedon

Map unit in which located: Hapney fine sandy loam, moist, 0 to 1 percent slopes
Location in the survey area: about 2,000 feet west and 1,700 feet south of the northeast corner of sec. 8, T. 6 N., R. 90 W.

E—0 to 2 inches; pale brown (10YR 6/3) fine sandy loam, brown (10YR 4/3) moist; weak medium granular structure; soft, very friable, slightly sticky and non-plastic; mildly alkaline; abrupt smooth boundary.
Btn1—2 to 9 inches; dark brown (10YR 4/3) clay, very dark grayish brown (10YR 3/2) moist; strong fine columnar structure parting to strong very fine subangular blocky; very hard, firm, very sticky and very plastic; many distinct clay films on faces of peds; moderately alkaline; abrupt wavy boundary.

Btn2—9 to 15 inches; brown (10YR 5/3) clay loam, dark brown (10YR 4/3) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; very hard, firm, very sticky and very plastic; many distinct clay films on faces of peds and along interstitial pores; strongly alkaline; clear wavy boundary.
Bkn1—15 to 23 inches; light yellowish brown (2.5Y 6/3) silty clay loam, light brown (2.5Y 5/3) moist; weak coarse subangular blocky structure; very hard, friable, very sticky and very plastic; common fine threads of calcium carbonate and other salts; violently effervescent; very strongly alkaline; gradual wavy boundary.
Bkn2—23 to 37 inches; light brownish gray (10YR 6/2) clay loam, grayish brown (10YR 5/2) moist; weak coarse subangular blocky structure; very hard, friable, very sticky and very plastic; common fine threads of calcium carbonate; violently effervescent; very strongly alkaline; clear wavy boundary.
Bkn3—37 to 50 inches; pale brown (10YR 6/3) clay loam, brown (10YR 5/3) moist; massive; very hard, friable, sticky and plastic; common fine threads of calcium carbonate; violently effervescent; very strongly alkaline; abrupt smooth boundary.
C—50 to 60 inches; pale yellow (2.5Y 7/3) sandy clay loam, light olive brown (2.5Y 5/3) moist; common faint yellowish brown (10YR 5/8) mottles; massive; hard, friable, sticky and plastic; strongly effervescent; strongly alkaline.

Range in Characteristics

Note: This soil is outside the range of the Hapney series because this soil has an upper Bt horizon that is moderately alkaline; it also consistently has horizons with accumulations of secondary calcium carbonate and is moist in the moisture control section for a longer period of time during the growing season.
Depth to a seasonal high water table: depth of 4 to 6 feet from April through June
Depth to Bt horizons: 12 to 20 inches
Thickness of the mollic epipedon: 7 to 12 inches

Bt1 horizon:
Texture: clay or clay loam

Bt2 horizon:
Texture: clay or clay loam
Reaction: moderately alkaline or strongly alkaline

Bkn horizons:
Hue: 10YR or 2.5Y
Texture: loam, sandy clay loam, clay loam, or silty clay loam
Reaction: strongly alkaline or very strongly alkaline

C horizon:
Hue: 10YR or 2.5Y
Texture: sandy clay loam or clay loam
Reaction: moderately alkaline or strongly alkaline

Haterton Series

Map unit(s): 95
Depth class: very shallow to shallow
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: hillslopes, plateaus
Parent material: residuum derived from siltstone and fine grained sandstone
Elevation: 6,100 to 7,200 feet (1,859 to 2,195 meters)
Slope: 3 to 12 percent
Climatic data:
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Loamy, mixed (calcareous), frigid, shallow Typic Torriorthents

Typical Pedon

Map unit in which located: Haterton-Piezon complex, 3 to 12 percent slopes
Location in the survey area: about 1,300 feet west and 1,200 feet south of the northeast corner of sec. 13, T. 10 N., R. 99 W.

A—0 to 2 inches; pale yellow (2.5Y 7/4) loam, light olive brown (2.5Y 5/4) moist; moderate fine platy structure parting to moderate very fine subangular blocky; hard, friable, sticky and plastic; 10 percent channers; violently effervescent; strongly alkaline; clear smooth boundary.
AC—2 to 14 inches; very pale brown (10YR 7/4) channery loam, yellowish brown (10YR 5/4) moist; weak medium subangular blocky structure; hard, friable, sticky and plastic; 15 percent channers; violently effervescent; strongly alkaline; gradual wavy boundary.
C—14 to 16 inches; very pale brown (10YR 7/4) channery loam, yellowish brown (10YR 5/4) moist; massive; slightly hard, friable, sticky and

plastic; 20 percent channers; few medium masses of calcium carbonate; violently effervescent; moderately alkaline; clear smooth boundary.
Cr—16 inches; weakly consolidated sandstone.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 18 to 27 percent
Rock fragment content: 5 to 25 percent channery fragments
Depth to paralithic contact: 7 to 20 inches

A horizon:
Reaction: moderately alkaline or strongly alkaline

C horizon:
Texture: loam or channery loam
Reaction: moderately alkaline or strongly alkaline

Heathcoat Series

Map unit(s): 96, 97
Depth class: very deep
Drainage class: well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Landform: benches, plateaus
Parent material: colluvium and residuum derived from shale and sandstone, residuum derived from sandstone mantled by basalt rock fragments
Elevation: 7,300 to 8,400 feet (2,225 to 2,560 meters)
Slope: 1 to 20 percent
Climatic data:
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Frost-free period: 50 to 75 days

Taxonomic class: Fine, montmorillonitic Argic Cryoborolls

Typical Pedon

Map unit in which located: Heathcoat-Clayburn complex, 5 to 35 percent slopes, very stony
Location in the survey area: about 100 feet north and 1,200 feet east of the southwest corner of sec. 8, T. 4 N., R. 102 W.

A1—0 to 2 inches; dark grayish brown (10YR 4/2) loam, very dark gray (10YR 3/1) moist; weak thin platy structure parting to weak fine granular; soft, very friable, slightly sticky and slightly plastic; neutral; abrupt wavy boundary.
A2—2 to 6 inches; dark grayish brown (10YR 4/2) loam, very dark gray (10YR 3/1) moist; weak coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; neutral; clear wavy boundary.
Bt1—6 to 11 inches; brown (10YR 5/3) clay loam, dark brown (10YR 3/3) moist; moderate fine and medium subangular blocky structure; hard, firm, sticky and plastic; common distinct clay films on faces of peds and along interstitial pores; neutral; clear wavy boundary.
Bt2—11 to 22 inches; brown (10YR 5/3) clay loam, brown (10YR 4/3) moist; strong medium and coarse angular blocky structure; very hard, firm, sticky and plastic; common distinct clay films on faces of peds and along interstitial pores; neutral; gradual wavy boundary.
Bk1—22 to 29 inches; pale brown (10YR 6/3) clay loam, brown (10YR 5/3) moist; weak medium subangular blocky structure; hard, firm, sticky and plastic; 5 percent calcium carbonate equivalent; strongly effervescent; moderately alkaline; clear wavy boundary.
Bk2—29 to 50 inches; very pale brown (10YR 7/3) clay loam, pale brown (10YR 6/3) moist; massive; hard, firm, sticky and plastic; 10 percent gravel; 20 percent calcium carbonate equivalent; violently effervescent; moderately alkaline; gradual wavy boundary.
Bk3—50 to 60 inches; light yellowish brown (10YR 6/4) clay loam, yellowish brown (10YR 5/4) moist; massive; hard, firm, sticky and plastic; 10 percent calcium carbonate equivalent; violently effervescent; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Calcium carbonate equivalent: 15 to 35 percent
Note: This soil is outside the range of the Heathcoat series because this soil has a average annual precipitation of 16 to 18 inches.
Depth to secondary calcium carbonate: 20 to 35 inches
Thickness of the mollic epipedon: 7 to 15 inches

A horizon:
Reaction: neutral or mildly alkaline

Bt horizon:
Hue: 10YR or 7.5YR
Texture: clay loam, sandy clay, or clay
Clay content: 35 to 45 percent
Rock fragment content: 0 to 15 percent
Reaction: neutral or mildly alkaline

Bk horizon:
Hue: 10YR or 2.5Y

Texture: sandy clay loam, clay loam, clay, or silty clay
Clay content: 30 to 45 percent
Rock fragment content: 0 to 15 percent

Herm Series

Map unit(s): 98
Depth class: very deep
Drainage class: well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Landform: hillslopes
Parent material: colluvium derived from shale
Elevation: 6,800 to 7,700 feet (2,073 to 2,347 meters)
Slope: 10 to 20 percent
Climatic data:
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine, montmorillonitic Typic Argiborolls

Typical Pedon

Map unit in which located: Herm-Fughes complex, 10 to 20 percent slopes, extremely bouldery
Location in the survey area: about 900 feet south and 1,900 feet west of the northeast corner of sec. 36, T. 9 N., R. 89 W.

A—0 to 3 inches; dark grayish brown (10YR 4/2) bouldery clay loam, very dark grayish brown (10YR 3/2) moist; weak coarse subangular blocky structure parting to weak fine subangular blocky; slightly hard, very friable, slightly sticky and slightly plastic; 5 percent gravel, 5 percent cobbles, 10 percent stones, 6 percent boulders; neutral; abrupt smooth boundary.
BA—3 to 10 inches; dark grayish brown (10YR 4/2) bouldery clay loam, very dark grayish brown (10YR 3/2) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; slightly hard, very friable, slightly sticky and slightly plastic; 5 percent gravel, 5 percent cobbles, 10 percent stones, 10 percent boulders; slightly acid; abrupt smooth boundary.
Bt1—10 to 18 inches; yellowish brown (10YR 5/4) stony clay; dark yellowish brown (10YR 4/4) moist; strong medium prismatic structure parting to strong medium subangular blocky; very hard, firm, very sticky and very plastic; few faint clay films on faces of peds and along interstitial pores; 5 percent gravel, 5 percent cobbles, 10 percent stones; slightly acid; clear smooth boundary.
Bt2—18 to 39 inches; brownish yellow (10YR 6/6) clay, yellowish brown (10YR 5/6) moist; strong coarse subangular blocky structure parting to strong medium subangular blocky; very hard, firm, very sticky and very plastic; common distinct clay films on faces of peds and along interstitial pores; 5 percent gravel, 5 percent cobbles; slightly acid; gradual smooth boundary.
Bt3—39 to 45 inches; yellow (10YR 7/6) clay, brownish yellow (10YR 6/6) moist; moderate coarse subangular blocky structure parting to moderate medium subangular blocky; very hard, firm, very sticky, and very plastic; common distinct clay films on faces of peds and along interstitial pores; 5 percent gravel, 5 percent cobbles; neutral; abrupt smooth boundary.
BC—45 to 49 inches; light gray (2.5Y 7/2) clay, pale yellow (2.5Y 7/4) moist; moderate fine subangular blocky structure parting to moderate very fine subangular blocky; very hard, firm, very sticky and very plastic; 5 percent gravel, 5 percent cobbles; neutral; abrupt smooth boundary.
Bk—49 to 60 inches; brownish yellow (10YR 6/6) clay, yellowish brown (10YR 5/6) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; very hard, firm, very sticky and very plastic; 5 percent gravel, 5 percent cobbles; strongly effervescent; mildly alkaline.

Range in Characteristics

Depth to argillic horizon: 40 to 55 inches
Depth to secondary calcium carbonate: 40 to 55 inches
Thickness of the mollic epipedon: 10 to 15 inches

Bt1 horizon:
Hue: 10YR or 7.5YR
Reaction: slightly acid or neutral

Bt2 and Bt3 horizons:
Reaction: slightly acid or neutral

Hesperus Series

Map unit(s): 99, 100, 101
Local phase(s): dry
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: hills, mountainsides, plateaus
Position on landform: footslopes

Parent material: colluvium and residuum derived from sandstone mantled by basalt rock fragments, loess and in alluvium derived from sandstone and shale, residuum derived from sandstone
Elevation: 6,500 to 7,600 feet (1,981 to 2,316 meters)
Slope: 2 to 50 percent
Climatic data:
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Frost-free period: 65 to 85 days

Taxonomic class: Fine-loamy, mixed Pachic Argiborolls

Typical Pedon

Map unit in which located: Hesperus fine sandy loam, dry, 2 to 15 percent slopes
Location in the survey area: about 800 feet west and 25 feet north of the southeast corner of sec. 26, T. 6 N., R. 91 W.

A1—0 to 5 inches; grayish brown (10YR 5/2) fine sandy loam, very dark (10YR 3/1) moist; moderate fine and medium granular structure; soft, very friable, slightly sticky and nonplastic; neutral; clear wavy boundary.
A2—5 to 20 inches; grayish brown (10YR 5/2) loam, very dark grayish brown (10YR 3/2) moist; weak to moderate medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; neutral; clear wavy boundary.
Bt1—20 to 34 inches; brown (10YR 5/3) clay loam, very dark grayish brown (10YR 3/2) moist; moderate medium and coarse angular blocky structure; very hard, firm, sticky and plastic; very few faint clay films on faces of peds and bridging sand grains; neutral; clear wavy boundary.
Bt2—34 to 52 inches; pale brown (10YR 6/3) clay loam, dark brown (10YR 4/3) moist; moderate coarse subangular blocky structure; very hard, firm, sticky and plastic; very few faint clay films on faces of peds; neutral; gradual wavy boundary.
BC—52 to 60 inches; pale brown (10YR 6/3) clay loam, brown (10YR 4/3) moist; weak coarse prismatic structure parting to weak coarse subangular blocky; very hard, firm, sticky and plastic; mildly alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 0 to 5 percent
Depth to argillic horizon: 40 to 60 inches
Depth to secondary calcium carbonate: 40 or more inches
Thickness of the mollic epipedon: 17 to 40 inches

Bt horizon:
Texture: sandy clay loam or clay loam
Clay content: 27 to 35 percent

BC horizon:
Texture: sandy clay loam, clay loam, or loam
Clay content: 20 to 35 percent
Reaction: neutral or mildly alkaline

Hiatha Series

Map unit(s): 201
Depth class: shallow
Drainage class: well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Landform: hills
Position on landform: summits, backslopes
Parent material: residuum derived from shale
Elevation: 6,000 to 6,800 feet (1,829 to 2,073 meters)
Slope: 5 to 20 percent
Climatic data:
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Clayey, montmorillonitic (calcareous), frigid, shallow Typic Torriorthents

Typical Pedon

Map unit in which located: Tresano-Hiatha-Kandaly association, 2 to 20 percent slopes
Location in the survey area: about 50 feet north and 1,500 feet west of the southeast corner of sec. 17, T. 12 N., R. 98 W.

A—0 to 2 inches; reddish brown (5YR 5/4) silty clay, reddish brown (5YR 4/4) moist; moderate medium granular structure; soft, very friable, sticky and plastic; slightly effervescent; moderately alkaline; abrupt smooth boundary.
AC—2 to 6 inches; reddish brown (5YR 5/4) silty clay, reddish brown (5YR 4/4) moist; massive; hard, friable, sticky and plastic; 15 percent weakly consolidated shale fragments; slightly effervescent; moderately alkaline; gradual wavy boundary.
C—6 to 14 inches; reddish brown (5YR 5/4) silty clay, reddish brown (5YR 4/4) moist; massive; hard,

friable, sticky and plastic; 20 percent weakly consolidated shale fragments; slightly effervescent; moderately alkaline; gradual wavy boundary.
Cr—14 inches; weakly consolidated shale.

Range in Characteristics

Depth to paralithic contact: 10 to 20 inches
Hue: 2.5YR or 5YR

C horizon:
Texture: silty clay or clay
Rock fragment content: 10 to 35 percent weakly consolidated shale fragments
Reaction: moderately alkaline or strongly alkaline

Holter Series

Map unit(s): 102
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: hills
Position on landform: footslopes, toeslopes
Parent material: alluvium and colluvium derived from sandstone and limestone
Elevation: 7,000 to 8,200 feet (2,134 to 2,499 meters)
Slope: 10 to 25 percent
Climatic data:
Mean annual precipitation: 15 to 17 inches (381 to 432 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Loamy-skeletal, mixed Typic Argiborolls

Typical Pedon

Map unit in which located: Holter-Detra complex, 3 to 25 percent slopes, extremely stony
Location in the survey area: about 1,800 feet south and 800 feet east of the northwest corner of sec. 6, T. 5 N., R. 101 W.

A—0 to 3 inches; brown (7.5YR 4/2) very stony fine sandy loam, dark brown (7.5YR 3/2) moist; weak fine granular structure; soft, very friable, slightly sticky and slightly plastic; 10 percent gravel, 10 percent cobbles, 15 percent stones; neutral; clear smooth boundary.
AB—3 to 10 inches; brown (7.5YR 4/3) very stony fine sandy loam, dark brown (7.5YR 3/2) moist; weak medium subangular blocky structure parting to weak fine subangular blocky; slightly hard, friable, slightly sticky and slightly plastic; 15 percent gravel, 10 percent cobbles, 10 percent stones; mildly alkaline; clear smooth boundary.
Bt1—10 to 16 inches; reddish brown (5YR 4/4) very cobbly clay loam, dark reddish brown (5YR 3/4) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; slightly hard, friable, sticky and plastic; very few faint clay films on faces of peds; 15 percent gravel, 15 percent cobbles, 10 percent stones; mildly alkaline; gradual wavy boundary.
Bt2—16 to 23 inches; yellowish red (5YR 4/6) extremely cobbly clay loam, yellowish red (5YR 4/6) moist; weak medium subangular blocky structure parting to moderate fine subangular blocky; hard, firm, sticky and plastic; very few faint clay films on faces of peds; 25 percent gravel, 30 percent cobbles, 15 percent stones; mildly alkaline; clear smooth boundary.
Btk—23 to 29 inches; yellowish red (5YR 5/6) extremely cobbly sandy clay loam, yellowish red (5YR 4/6) moist; weak medium subangular blocky structure parting to weak fine subangular blocky; slightly hard, firm, sticky and plastic; very few faint clay films on faces of peds; 25 percent gravel, 30 percent cobbles, 15 percent stones; strongly effervescent; moderately alkaline; clear smooth boundary.
Bk1—29 to 36 inches; reddish yellow (5YR 6/6) extremely cobbly sandy clay loam, yellowish red (5YR 5/6) moist; weak medium subangular blocky structure parting to weak fine subangular blocky; slightly hard, friable, sticky and plastic; 25 percent gravel, 40 percent cobbles, 10 percent stones; violently effervescent; moderately alkaline; gradual smooth boundary.
Bk2—36 to 45 inches; reddish yellow (5YR 6/6) extremely cobbly loam, yellowish red (5YR 5/6) moist; weak medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; 25 percent gravel, 40 percent cobbles, 10 percent stones; violently effervescent; moderately alkaline; gradual smooth boundary.
Bk3—45 to 60 inches; reddish yellow (5YR 6/6) extremely cobbly loam, yellowish red (5YR 6/6) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; 25 percent gravel, 40 percent cobbles, 10 percent stones; violently effervescent; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 60 to 70 percent

Depth to secondary calcium carbonate: 20 to 35 inches
Hue: 7.5YR or 5YR
Thickness of the mollic epipedon: 10 to 14 inches

Iles Series

Map unit(s): 103
Depth class: very deep
Drainage class: well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Landform: plateaus
Parent material: loess
Elevation: 6,800 to 7,400 feet (2,073 to 2,256 meters)
Slope: 3 to 12 percent
Climatic data:
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Frost-free period: 65 to 85 days

Taxonomic class: Fine, montmorillonitic Mollic Eutroboralfs

Typical Pedon

Map unit in which located: Iles loam, 3 to 12 percent slopes
Location in the survey area: about 2,200 feet south and 2,400 feet east of the northwest corner of sec. 28, T. 5 N., R. 92 W.

A—0 to 5 inches; brown (10YR 5/3) loam, dark brown (10YR 3/3) moist; moderate thin platy structure parting to weak medium granular; soft, very friable, nonsticky and nonplastic; neutral; clear smooth boundary.
BAt—5 to 8 inches; brown (10YR 5/3) silty clay loam, dark brown (10YR 4/3) moist; moderate fine subangular blocky structure; hard, firm, sticky and plastic; very few faint clay films in pores; neutral; clear smooth boundary.
Bt1—8 to 12 inches; yellowish brown (10YR 5/4) silty clay loam, brown (10YR 4/3) moist; weak fine prismatic structure parting to moderate fine subangular blocky; very hard, firm, sticky and plastic; common faint clay films on faces of peds and in pores; neutral; gradual wavy boundary.
Bt2—12 to 25 inches; yellowish brown (10YR 5/4) silty clay loam, dark yellowish brown (10YR 4/4) moist; moderate medium prismatic structure parting to strong medium angular blocky; very hard, firm, sticky and plastic; common distinct clay films on faces of peds and in pores; neutral; clear wavy boundary.
Btk—25 to 29 inches; light yellowish brown (10YR 6/4) silty clay loam, yellowish brown (10YR 5/4) moist; moderate medium subangular blocky structure; slightly hard, friable, sticky and plastic; very few faint clay films on faces of peds and in pores; few very fine discontinuous vesicular pores; strongly effervescent; moderately alkaline; clear wavy boundary.
BCk—29 to 36 inches; very pale brown (10YR 7/3) clay loam, light yellowish brown (10YR 6/4) moist; weak coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine discontinuous vesicular pores; 20 percent calcium carbonate equivalent; violently effervescent; moderately alkaline; gradual wavy boundary.
Ck—36 to 60 inches; very pale brown (10YR 8/3) silt loam, very pale brown (10YR 7/4) moist; massive; soft, friable, slightly sticky and slightly plastic; common very fine and fine discontinuous vesicular pores; 55 percent calcium carbonate equivalent; violently effervescent; moderately alkaline.

Range in Characteristics

Calcium carbonate equivalent: 20 to 40 percent
Depth to secondary calcium carbonate: 20 to 30 inches

A horizon:
Rock fragment content: 0 to 10 percent gravel

Bt horizon:
Hue: 7.5YR or 10YR
Texture: clay loam, clay, or silty clay loam
Clay content: 35 to 50 percent

Bk2 horizon:
Texture: loam or silt loam
Hue: 10YR or 2.5Y

Irigul Series

Map unit(s): 28
Depth class: shallow
Drainage class: well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: convex slopes on plateaus
Parent material: residuum derived from sandstone
Elevation: 7,500 to 8,500 feet (2,286 to 2,591 meters)
Slope: 3 to 25 percent
Climatic data:
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)

Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Frost-free period: 60 to 70 days

Taxonomic class: Loamy-skeletal, mixed Lithic Cryoborolls

Typical Pedon

Map unit in which located: Carbol-Irigul-Rock outcrop complex, 3 to 25 percent slopes, very stony
Location in the survey area: about 2,000 feet west and 1,000 feet south of the northeast corner of sec. 25, T. 11 N., R. 102 W.

A—0 to 6 inches; brown (7.5YR 5/2) channery loam, dark brown (7.5YR 3/2) moist; moderate very fine granular structure; soft, very friable, slightly sticky and nonplastic; 15 percent channers, 5 percent stones; mildly alkaline; abrupt wavy boundary.
AC—6 to 11 inches; pinkish gray (7.5YR 6/2) very channery loam, dark brown (7.5YR 4/4) moist; weak fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; 50 percent channers; mildly alkaline; clear smooth boundary.
C—11 to 15 inches; pinkish gray (7.5YR 6/2) very channery loam, brown (7.5YR 5/4) moist; massive; soft, friable, slightly sticky and slightly plastic; 50 percent channers; mildly alkaline; abrupt wavy boundary.
R—15 inches; hard sandstone bedrock.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 35 to 60 percent
Depth to lithic contact: 10 to 20 inches
Hue: 7.5YR to 2.5YR
Reaction: neutral or mildly alkaline
Thickness of the mollic epipedon: 7 to 10 inches
Note: This soil is outside the range of the Irigul series because this soil has a hue of 5YR or 2.5YR in many pedons.

AC and C horizons:
Texture: very channery loam or very channery sandy clay loam

Ironco Series

Map unit(s): 104
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: mountainsides
Parent material: colluvium derived from sandstone
Elevation: 7,000 to 8,000 feet (2,134 to 2,438 meters)
Slope: 25 to 50 percent
Climatic data:
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Frost-free period: 65 to 85 days

Taxonomic class: Loamy-skeletal, mixed Typic Argiborolls

Typical Pedon

Map unit in which located: Ironco-Mulgon, dry, complex, 20 to 50 percent slopes, extremely bouldery
Location in the survey area: about 1,000 feet east and 1,900 feet north of the southwest corner of sec. 30, T. 9 N., R. 103 W.

A1—0 to 4 inches; dark brown (7.5YR 4/2) very bouldery loam, dark brown (7.5YR 3/2) moist; weak medium subangular blocky structure parting to weak fine granular; soft, very friable, slightly sticky and slightly plastic; 15 percent gravel, 15 percent cobbles, 10 percent stones, 10 percent boulders; neutral; clear smooth boundary.
A2—4 to 10 inches; dark reddish gray (5YR 4/2) very bouldery loam, dark reddish brown (5YR 3/2) moist; weak medium subangular blocky structure parting to weak fine subangular blocky; slightly hard, very friable, slightly sticky and slightly plastic; 15 percent gravel, 15 percent cobbles, 10 percent stones, 10 percent boulders; neutral; abrupt smooth boundary.
Bt1—10 to 31 inches; red (2.5YR 5/6) very stony clay loam, red (2.5YR 4/6) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; hard, firm, sticky and plastic; very few faint clay films on faces of peds and bridging sand grains; 15 percent gravel, 15 percent cobbles, 15 percent stones, 5 percent boulders; neutral; gradual smooth boundary.
Bt2—31 to 60 inches; light red (2.5YR 6/6) very stony clay loam, red (2.5YR 5/6) moist; moderate coarse subangular blocky structure parting to moderate medium subangular blocky; hard, firm, sticky and plastic; very few faint clay films on faces of peds and bridging sand grains; 15 percent gravel, 15 percent cobbles, 15 percent stones, 5 percent boulders; neutral.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 40 to 60 percent
Thickness of the mollic epipedon: 10 to 14 inches

Bt horizons:
Hue: 5YR or 2.5YR
Texture: very stony sandy clay loam or very stony clay loam
Reaction: neutral or slightly acid

Ironsprings Series

Map unit(s): 105, 106, 107, 183
Depth class: very deep
Drainage class: somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: alluvial fans, hills, hillslopes
Position on landform: backslopes, footslopes
Parent material: alluvium derived from sandstone, colluvium and residuum derived from sandstone, colluvium derived from sandstone, residuum derived from sandstone
Elevation: 6,200 to 7,300 feet (1,890 to 2,225 meters)
Slope: 1 to 30 percent
Climatic data:
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Coarse-loamy, mixed Aridic Argiborolls

Typical Pedon

Map unit in which located: Ironsprings-Maysprings-Gretdivid complex, 10 to 20 percent slopes
Location in the survey area: about 2,200 feet west and 1,600 feet north of the southeast corner of sec. 36, T. 9 N., R. 92 W.

A1—0 to 2 inches; brown (10YR 5/3) loamy coarse sand, dark brown (10YR 3/3) moist; weak coarse granular structure; soft, very friable, nonsticky and nonplastic; many fine and medium roots; 5 percent fine gravel; neutral; abrupt smooth boundary.
A2—2 to 14 inches; brown (10YR 4/3) loamy coarse sand, dark brown (10YR 3/3) moist; weak coarse subangular blocky structure parting to weak medium subangular blocky; soft, very friable, slightly sticky and nonplastic; many fine and medium roots; 5 percent fine gravel; neutral; clear smooth boundary.
BA—14 to 21 inches; yellowish brown (10YR 5/4) coarse sandy loam, brown (10YR 4/3) moist; weak coarse subangular blocky structure parting to weak medium subangular blocky; soft, very friable, slightly sticky and nonplastic; common fine and medium roots; 5 percent fine gravel; neutral; clear smooth boundary.
Bt1—21 to 26 inches; yellowish brown (10YR 5/4) coarse sandy loam, brown (10YR 4/3) moist; weak coarse subangular blocky structure parting to weak medium subangular blocky; soft, very friable, slightly sticky and nonplastic; few fine to medium roots; oriented clay bridging sand grains; 5 percent fine gravel; neutral; gradual smooth boundary.
Bt2—26 to 40 inches; yellowish brown (10YR 5/6) coarse sandy loam, dark yellowish brown (10YR 4/4) moist; weak coarse subangular blocky structure parting to weak medium subangular blocky; slightly hard, very friable, slightly sticky and nonplastic; few medium roots; oriented clay bridging sand grains; 5 percent fine gravel; neutral; gradual smooth boundary.
C—40 to 60 inches; dark yellowish brown (10YR 4/6) loamy coarse sand, yellowish brown (10YR 5/6) moist; massive; soft, very friable, nonsticky and nonplastic; 5 percent fine gravel; neutral.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 0 to 15 percent
Depth to argillic horizon: 20 to 40 inches
Thickness of the mollic epipedon: 10 to 15 inches

A horizon:
Texture: loamy sand or loamy coarse sand

B horizon:
Hue: 10YR or 7.5YR
Texture: coarse sandy loam, fine sandy loam, or sandy loam

C horizon:
Texture: coarse sand, loamy coarse sand, loamy sand, or loamy fine sand
Reaction: neutral or mildly alkaline

Jerry Series

Map unit(s): 42, 108, 116, 117
Depth class: very deep
Drainage class: well drained

Figure 30.—A typical profile of Cochetopa loam from map unit 37, Cochetopa loam, 12 to 25 percent slopes. Depths shown are in centimeters.

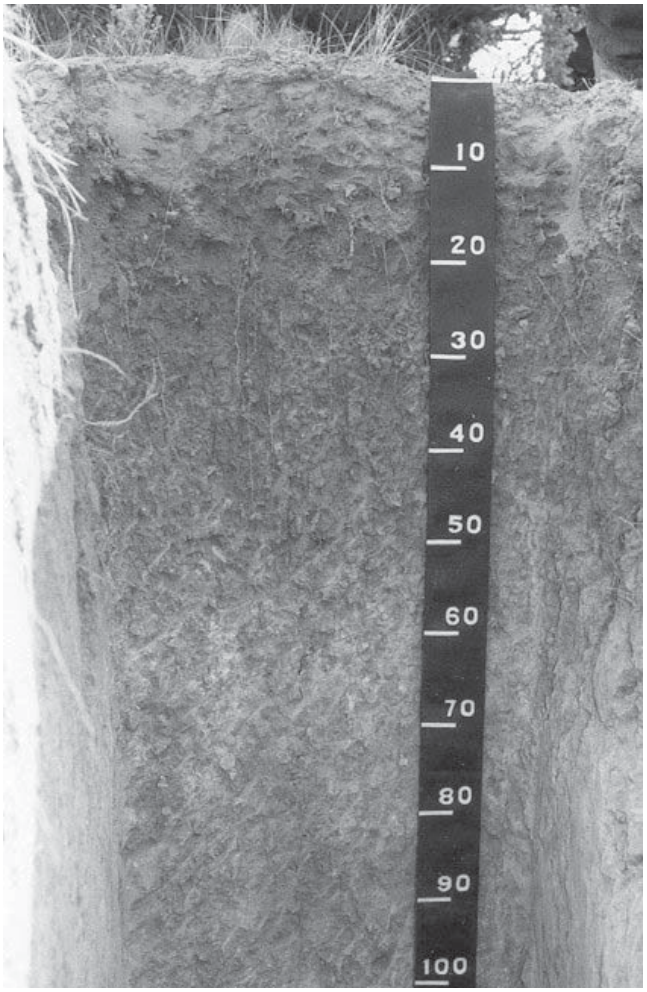

Figure 31.—A typical profile of Forelle loam. Forelle soils are one of the major soils used for dryland wheat production. Depths shown are in centimeters.

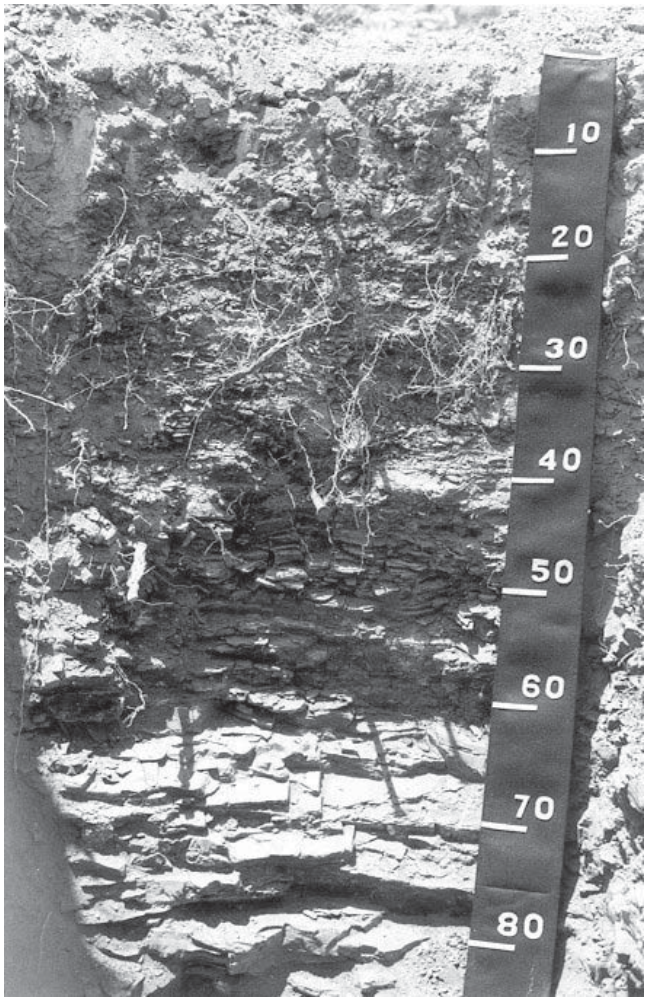

Figure 32.—A typical profile of the Moyerson soil. Note the paralithic contact at about 40 centimeters and the concentrations of roots above the paralithic contact.

Figure 33.—A typical profile of Rock River sandy loam from map unit 162, Rock River sandy loam, 3 to 12 percent slopes. Depths shown are in centimeters.

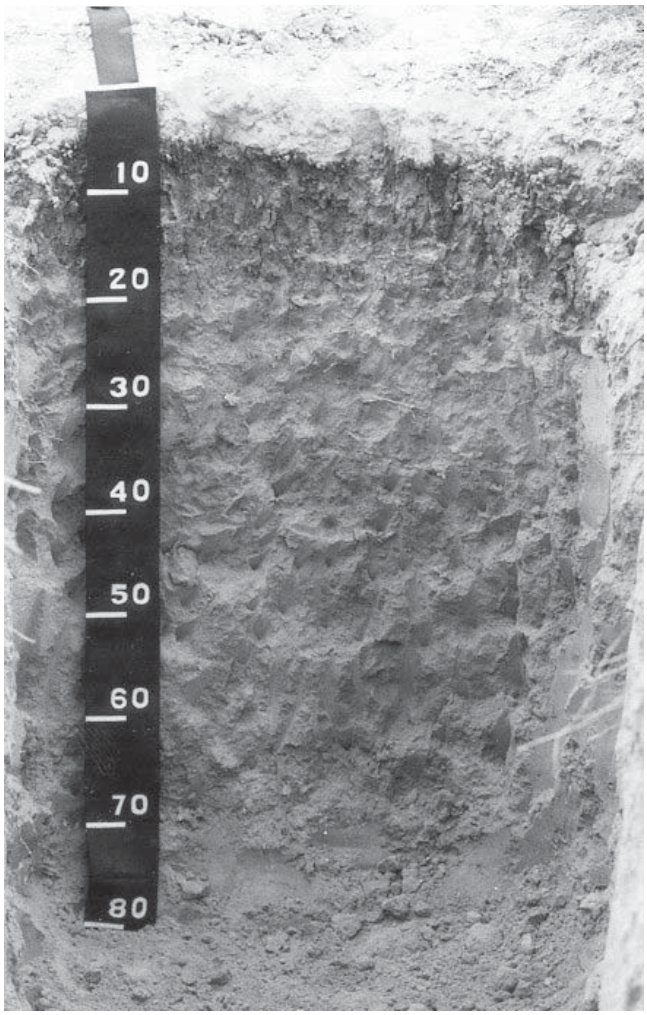

Figure 34.—A typical profile of Tisworth fine sandy loam from map unit 193, Tisworth fine sandy loam, 0 to 9 percent slopes. Depths shown are in inches.

Slowest permeability: .06 to 0.2 in./hr. (slow)
Landform: mountainsides, plateaus, convex positions on plateaus
Parent material: colluvium and residuum derived from shale, residuum derived from shale
Elevation: 7,000 to 8,600 feet (2,134 to 2,621 meters)
Slope: 3 to 65 percent
Climatic data:
Mean annual precipitation: 16 to 20 inches (406 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Frost-free period: 50 to 75 days

Taxonomic class: Fine, montmorillonitic Argic Cryoborolls

Typical Pedon

Map unit in which located: Jerry-Cochetopa complex, 5 to 35 percent slopes
Location in the survey area: about 800 feet east and 600 feet south of the northwest corner of sec. 3, T. 3 N., R. 94 W.

Oi—0 to 2 inches; slightly decomposed leaves and twigs.
A—2 to 12 inches; brown (10YR 5/3) loam, dark brown (10YR 3/3) moist; moderate medium granular structure; soft, very friable, slightly sticky and slightly plastic; neutral; abrupt smooth boundary.
Bt—12 to 23 inches; brown (10YR 5/3) clay loam, dark brown (10YR 4/3) moist; moderate medium subangular blocky parting to moderate fine subangular blocky structure; hard, firm, sticky and plastic; few faint clay films on faces of peds and along interstitial pores; mildly alkaline; gradual smooth boundary.
Btk—23 to 29 inches; pale brown (10YR 6/3) silty clay, brown (10YR 5/3) moist; strong medium subangular blocky structure; very hard, firm, sticky and plastic; few faint clay films on faces of peds and along interstitial pores; calcium carbonate disseminated and in a few fine threads; strongly effervescent; moderately alkaline; gradual wavy boundary.
Bk1—29 to 39 inches; light brownish gray (10YR 6/2) silty clay loam, light brownish gray (10YR 6/2) moist; moderate coarse prismatic structure parting to strong medium angular blocky; extremely hard, very firm, very sticky and very plastic; common fine seams of calcium carbonate; violently effervescent; moderately alkaline; gradual wavy boundary.
Bk2—39 to 44 inches; gray (10YR 6/1) silty clay loam, gray (10YR 5/1) moist; moderate medium subangular blocky structure; very hard, very firm, very sticky and very plastic; common fine seams and masses of secondary calcium carbonate; violently effervescent; moderately alkaline; clear wavy boundary.
Bk3—44 to 60 inches; gray (10YR 6/1) silty clay loam, gray (10YR 5/1) moist; massive; many fine seams and masses of secondary calcium carbonate; violently effervescent; moderately alkaline.

Range in Characteristics

Depth to argillic horizon: 25 to 40 inches
Depth to secondary calcium carbonate: 25 to 40 inches
Thickness of the mollic epipedon: 9 to 15 inches

Bt and Bk horizons:
Hue: 10YR or 7.5YR
Texture: clay loam, silty clay loam, silty clay, or clay

Joebas Series

Map unit(s): 109
Depth class: shallow
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: plateaus, small structural benches on mountainsides
Parent material: residuum derived from sandstone and quartzite
Elevation: 6,000 to 8,000 feet (1,829 to 2,438 meters)
Slope: 5 to 25 percent
Climatic data:
Mean annual precipitation: 11 to 16 inches (279 to 406 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Loamy, mixed Borollic Lithic Haplargids

Typical Pedon

Map unit in which located: Joebas-Rock outcrop complex, 5 to 40 percent slopes
Location in the survey area: about 2,400 feet west and 1,700 feet north of the southeast corner of sec. 2, T. 10 N., R. 102 W.

A—0 to 3 inches; brown (7.5YR 4/4) gravelly sandy loam, dark brown (7.5YR 3/2) moist; weak medium granular structure; soft, very friable,

slightly sticky and slightly plastic; 15 percent gravel; neutral; abrupt smooth boundary.
BA—3 to 7 inches; yellowish red (5YR 5/6) gravelly sandy loam, dark reddish brown (5YR 3/4) moist; weak medium subangular blocky structure parting to weak fine subangular blocky; slightly hard, very friable, slightly sticky and slightly plastic; 15 percent gravel; neutral; clear smooth boundary.
Bt—7 to 13 inches; yellowish red (5YR 5/6) gravelly sandy clay loam, reddish brown (5YR 4/4) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; slightly hard, friable, slightly sticky and slightly plastic; few faint clay films on ped faces; 15 percent gravel; neutral; clear smooth boundary.
BC—13 to 16 inches; yellowish red (5YR 5/6) gravelly sandy clay loam, reddish brown (5YR 4/4) moist; moderate medium subangular blocky structure parting to weak fine subangular blocky; slightly hard, friable, slightly sticky and slightly plastic; 20 percent gravel; neutral; abrupt wavy boundary.
R—16 inches; hard reddish quartzite bedrock.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 5 to 35 percent
Depth to lithic contact: 10 to 20 inches

A horizon:
Hue: 7.5YR to 2.5YR.
Reaction: neutral or mildly alkaline

Bt horizon:
Hue: 2.5YR or 5YR
Reaction: neutral or mildly alkaline
Texture: gravelly sandy clay loam or sandy clay loam

BC horizon:
Hue: 2.5YR or 5YR
Reaction: neutral to moderately alkaline
Texture: gravelly sandy clay loam, cobbly sandy loam, gravelly sandy loam, sandy clay loam, or sandy loam

Kandaly Series

Map unit(s): 201
Depth class: very deep
Drainage class: excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Landform: hills
Position on landform: summits
Parent material: eolian deposits derived from sandstone
Elevation: 6,000 to 6,800 feet (1,829 to 2,073 meters)
Slope: 2 to 12 percent
Climatic data:
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Mixed, frigid Typic Torripsamments

Typical Pedon

Map unit in which located: Tresano-Hiatha-Kandaly association, 2 to 20 percent slopes
Location in the survey area: about 1,500 feet north and 800 feet east of the southwest corner of sec. 33, T. 12 N., R. 96 W.

A—0 to 3 inches; light yellowish brown (10YR 6/4) loamy sand, brown (10YR 4/3) moist; single grained; loose, nonsticky and nonplastic; strongly effervescent; moderately alkaline; clear smooth boundary.
AC—3 to 8 inches; light yellowish brown (10YR 6/4) loamy sand, yellowish brown (10YR 5/4) moist; single grained; loose, nonsticky and nonplastic; strongly effervescent; moderately alkaline; clear smooth boundary.
C—8 to 60 inches; very pale brown (10YR 7/4) loamy sand, light yellowish brown (10YR 6/4) moist; single grained; loose, nonsticky and nonplastic; strongly effervescent; moderately alkaline.

Range in Characteristics

Depth to effervescence: 0 to 6 inches
Hue: 10YR or 2.5Y

C horizon:
Texture: loamy sand or sand

Kemmerer Series

Map unit(s): 110, 111, 112, 113
Depth class: moderately deep
Drainage class: well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Landform: hills
Parent material: residuum derived from shale
Elevation: 6,000 to 7,200 feet (1,829 to 2,195 meters)
Slope: 5 to 65 percent
Climatic data:
Mean annual precipitation: 11 to 14 inches (279 to 356 millimeters)

Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine, montmorillonitic Borollic Camborthids

Typical Pedon

Map unit in which located: Kemmerer-Yamo complex, 5 to 30 percent slopes
Location in the survey area: about 1,200 feet west and 2,100 feet south of the northeast corner of sec. 18, T. 4 N., R. 93 W.

A—0 to 3 inches; light brownish gray (2.5Y 6/2) silty clay loam, dark grayish brown (10YR 4/2) moist; weak fine granular structure; hard, firm, sticky and plastic; slightly effervescent; mildly alkaline; clear smooth boundary.
Bw—3 to 15 inches; light brownish gray (2.5Y 6/2) clay, olive brown (2.5Y 4/4) moist; moderate medium subangular blocky structure parting to weak medium subangular blocky; hard, firm, sticky and plastic; 10 percent weakly consolidated shale fragments; strongly effervescent; moderately alkaline; clear wavy boundary.
BCky—15 to 22 inches; light brownish gray (2.5Y 6/2) clay, light olive brown (2.5Y 5/4) moist; 60 percent moderate medium subangular blocky structure and 40 percent platy rock structure; hard, firm, sticky and plastic; common clusters of gypsum crystals; common fine threads of calcium carbonate; strongly effervescent; moderately alkaline; clear wavy boundary.
Cr—22 inches; weakly consolidated light brownish gray calcareous shale.

Range in Characteristics

Depth to effervescence: 0 to 6 inches
Depth to paralithic contact: 20 to 40 inches

A horizon:
Texture: silty clay loam or very gravelly loam

Bw horizon:
Texture: clay, silty clay, gravelly clay loam, or gravelly silty clay loam
Clay content: 35 to 50 percent

Bk horizon:
Texture: silty clay loam, clay, or silty clay

Lakebench Series

Map unit(s): 232, 233
Depth class: very deep
Drainage class: well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: alluvial fans, fan remnants, structural benches
Position on landform: footslopes, toeslopes
Parent material: mixed source alluvium and/or residuum
Elevation: 6,000 to 7,000 feet (1,829 to 2,134 meters)
Slope: 5 to 30 percent
Climatic data:
Mean annual precipitation: 12 to 15 inches (305 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Coarse-loamy, mixed, superactive, frigid Haplocalcidic Ustochrepts

Typical Pedon

Map unit in which located: Lakebench-Yampa complex, 5 to 30 percent slopes, very stony, from the Dinosaur National Monument Soil Survey
Location in the Dinosaur National Monument survey area: about 100 feet east and 1,350 feet south of the northwest corner of section 24, T. 6 N., R. 100 W., NMPM latitude 40 degrees, 26 minutes, 45 seconds N. and longitude 108 degrees, 34 minutes, 45 seconds W.

The soil surface is covered with limestone rock fragments, consisting of 5 percent gravel.

A—0 to 3 inches; brown (7.5YR 4/4) silt loam, dark brown (7.5YR 3/3) moist; moderate fine and medium granular structure; soft, friable, slightly sticky and slightly plastic; many very fine and fine roots; few very fine tubular pores; 5 percent gravel; strongly effervescent; 6 percent calcium carbonate equivalent; calcium carbonate is disseminated; slightly alkaline; clear smooth boundary.
Bk1—3 to 9 inches; brown (7.5YR 5/4) loam, brown (7.5YR 4/3) moist; moderate fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine, common coarse roots; few very fine tubular pores; common fine irregular calcium carbonate threads throughout; violently effervescent; 21 percent calcium carbonate equivalent; slightly alkaline; abrupt smooth boundary.
Bk2—9 to 25 inches; pinkish white (7.5YR 8/2) loam, pink (7.5YR 7/3) moist; weak fine and medium subangular blocky structure; slightly hard, friable,

slightly sticky and slightly plastic; few very fine and fine roots; few very fine tubular pores; many coarse and very coarse irregular soft calcium carbonate masses throughout; violently effervescent; 40 percent calcium carbonate equivalent; moderately alkaline; gradual wavy boundary.

Bk3—25 to 35 inches; pink (7.5YR 7/3) loam, light reddish brown (5YR 6/4) moist; weak fine and medium subangular blocky structure; hard, firm, sticky and plastic; few fine and medium roots; few very fine tubular pores; many fine and medium irregular soft calcium carbonate masses throughout; violently effervescent; 24 percent calcium carbonate equivalent; moderately alkaline; gradual smooth boundary.

Bk4—35 to 45 inches; light reddish brown (5YR 6/3) loam, reddish brown (5YR 5/4) moist; weak fine and medium subangular blocky structure; hard, firm, sticky and plastic; few fine and medium roots; few very fine tubular pores; many fine and medium irregular soft calcium carbonate masses throughout; violently effervescent; 24 percent calcium carbonate equivalent; moderately alkaline; gradual smooth boundary.

Bk5—45 to 50 inches; reddish brown (5YR 5/3) gravelly loam, reddish brown (5YR 4/4) moist; weak fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; few fine and medium roots; few very fine tubular pores; 20 percent gravel; many fine irregular soft calcium carbonate masses throughout; violently effervescent; 21 percent calcium carbonate equivalent; moderately alkaline; gradual wavy boundary.

Bk6—50 to 60 inches; light reddish brown (5YR 6/4) loam, reddish brown (5YR 5/4) moist; weak fine and medium subangular blocky structure; slightly hard, friable, sticky and plastic; few fine and medium roots; few very fine tubular pores; many fine irregular soft calcium carbonate masses throughout; violently effervescent; 21 percent calcium carbonate equivalent; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
- *Clay content:* 15 to 30 percent total clay with 10 to 18 percent as noncarbonate clay
- *Rock fragment content:* 0 to 20 percent
- *Calcium carbonate equivalent:* 15 to 40 percent

Depth to calcic horizon: 3 to 30 inches
Thickness of the solum: 60 or more inches

A horizon:
- *Hue:* 5YR or 7.5YR
- *Value:* 3 to 5 dry, 2 to 4 moist
- *Chroma:* 3 to 5
- *Texture:* loamy fine sand, fine sandy loam, or silt loam
- *Reaction:* neutral or slightly alkaline

Bw horizon: (if present)
- *Hue:* 5YR or 7.5YR
- *Value:* 3 to 6
- *Chroma:* 4 to 6
- *Texture:* fine sandy loam or loam
- *Reaction:* neutral to moderately alkaline

Bk horizons:
- *Hue:* 5YR or 7.5YR
- *Value:* 4 to 8 dry, 4 to 7 moist
- *Chroma:* 2 to 6
- *Texture:* fine sandy loam, silt loam, loam, gravelly loam, or clay loam
- *Reaction:* slightly alkaline to strongly alkaline

Lamphier Series

Map unit(s): 114, 115, 116, 117
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: mountainsides, plateaus
Parent material: colluvium and residuum derived from sandstone
Elevation: 7,000 to 8,600 feet (2,134 to 2,621 meters)
Slope: 3 to 65 percent
Climatic data:
- *Mean annual precipitation:* 18 to 20 inches (457 to 508 millimeters)
- *Mean annual air temperature:* 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
- *Frost-free period:* 50 to 75 days

Taxonomic class: Fine-loamy, mixed Pachic Cryoborolls

Typical Pedon

Map unit in which located: Lamphier fine sandy loam, 25 to 65 percent slopes
Location in the survey area: about 2,500 feet west and 1,500 feet north of the southeast corner of sec. 8, T. 3 N., R. 94 W.

Oe—0 to 2 inches; moderately decomposed leaves and twigs.

A1—2 to 7 inches; grayish brown (10YR 5/2) fine sandy loam, very dark grayish brown (10YR 3/2)

moist; weak medium granular structure; soft, very friable, slightly sticky and slightly plastic; neutral; clear wavy boundary.
A2—7 to 24 inches; grayish brown (10YR 5/2) fine sandy loam, very dark grayish brown (10YR 3/2) moist; weak medium granular structure; soft, very friable, slightly sticky and slightly plastic; 15 percent fine gravel; neutral; clear wavy boundary.
Bw—24 to 32 inches; grayish brown (10YR 5/2) sandy clay loam, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure; soft, friable, slightly sticky and slightly plastic; neutral; clear wavy boundary.
C—32 to 60 inches; pale brown (10YR 6/3) sandy clay loam, brown (10YR 4/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; neutral.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 0 to 15 percent
Thickness of the mollic epipedon: 16 to 40 inches
Note: This soil is outside the range of the Lamphier Series due to the 10YR hue in the Bw and C horizons.

B horizon:
Texture: loam or sandy clay loam

C horizon:
Texture: loam or sandy clay loam

Lander Series

Map unit(s): 118
Depth class: very deep
Drainage class: somewhat poorly drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: flood plains
Parent material: alluvium derived from mixed sources
Elevation: 6,000 to 7,000 feet (1,829 to 2,134 meters)
Slope: 0 to 3 percent
Climatic data:
Mean annual precipitation: 12 to 16 inches (305 to 406 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine-loamy, mixed Fluvaquentic Haploborolls

Typical Pedon

Map unit in which located: Lander loam, 0 to 3 percent slopes
Location in the survey area: about 2,500 feet east and 200 feet north of the southwest corner of sec. 17, T. 6 N., R. 91 W.

A1—0 to 5 inches; dark grayish brown (10YR 4/2) loam, very dark brown (10YR 2/2) moist; weak medium granular structure; slightly hard, very friable, slightly sticky and slightly plastic; neutral, clear smooth boundary.
A2—5 to 10 inches; dark grayish brown (10YR 4/2) loam, very dark grayish brown (10YR 3/2) moist, moderate medium granular structure; slightly hard, very friable, slightly sticky and slightly plastic; neutral; abrupt smooth boundary.
Bw1—10 to 14 inches; brown (10YR 4/3) sandy clay loam, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure; hard, friable, slightly sticky and slightly plastic; mildly alkaline; abrupt smooth boundary.
Bw2—14 to 20 inches; brown (10YR 5/3) fine sandy loam, brown (10YR 4/3) moist; weak medium subangular blocky structure; hard, friable, slightly sticky and nonplastic; mildly alkaline; abrupt smooth boundary.
Ab—20 to 36 inches; very dark grayish brown (10YR 3/2) clay loam containing a thin layer of brown (10YR 5/3) sandy clay loam, very dark brown (10YR 2/2) moist; weak medium subangular blocky structure; hard, firm, sticky and plastic; mildly alkaline; clear smooth boundary.
Cg—36 to 44 inches; gray (10YR 5/1) clay loam, dark gray (10YR 4/1) moist; common fine distinct strong brown (7.5YR 5/8) mottles; massive; hard, firm, sticky and plastic; strongly effervescent; moderately alkaline; abrupt smooth boundary.
2C1—44 to 55 inches; light yellowish brown (10YR 6/4) fine sand, yellowish brown (10YR 5/6) moist; single grained; loose, nonsticky and nonplastic; mildly alkaline; abrupt smooth boundary.
2C2—55 to 60 inches; brownish yellow (10YR 6/6) extremely gravelly sand, yellowish brown (10YR 5/6) moist; single grained; loose, nonsticky and nonplastic; 50 percent gravel, 10 percent cobbles; mildly alkaline.

Range in Characteristics

Thickness of the mollic epipedon: 10 to 15 inches
Depth to a seasonal high water table: 2 1/2 to 3 1/2 feet from April through June
Note: Horizons that effervesce are common, but occur at random depths and are discontinuous horizontally and vertically.

Ab and C horizons:
Texture: stratified layers of loam, sandy clay loam,

silt loam, silty clay loam, or clay loam; thin layers of loamy sand or sandy loam may also occur at any depth
Reaction: mildly alkaline or moderately alkaline

2C horizons: (if present)
Texture: very gravelly sand, very cobbly sand, or sand

Langspring Series

Map unit(s): 119, 175, 207
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: hillslopes, plateaus, planar areas on plateaus
Parent material: loess over residuum derived from sandstone, loess over residuum derived from sandstone and siltstone
Elevation: 6,000 to 7,300 feet (1,829 to 2,225 meters)
Slope: 1 to 25 percent
Climatic data:
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine-loamy, mixed, frigid Typic Calciorthids

Typical Pedon

Map unit in which located: Langspring sandy loam, 3 to 12 percent slopes
Location in the survey area: about 1,100 feet east and 1,300 feet south of the northwest corner of sec. 23, T. 9 N., R. 99 W.

A—0 to 3 inches; very pale brown (10YR 7/3) sandy loam; brown (10YR 4/3) moist; weak thin platy structure; soft, very friable, nonsticky and slightly plastic; strongly effervescent; moderately alkaline; abrupt smooth boundary.
Bw—3 to 11 inches; light yellowish brown (10YR 6/4) sandy clay loam, dark yellowish brown (10YR 4/4) moist; weak medium subangular blocky structure; slightly hard, very friable, sticky and plastic; strongly effervescent; moderately alkaline; clear wavy boundary.
Bk1—11 to 17 inches; very pale brown (10YR 7/3) loam, light yellowish brown (10YR 6/4) moist; moderate medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; violently effervescent; moderately alkaline; clear wavy boundary.
Bk2—17 to 42 inches; white (10YR 8/2) sandy clay loam, light gray (10YR 7/2) moist; massive; slightly hard, very friable, slightly sticky and slightly plastic; 5 percent gravel; 35 percent calcium carbonate equivalent; violently effervescent; strongly alkaline; clear wavy boundary.
Bk3—42 to 53 inches; light gray (10YR 7/2) fine sandy loam, light yellowish brown (10YR 6/4) moist; massive; very hard, very friable, nonsticky and nonplastic; 5 percent gravel; 12 percent calcium carbonate equivalent; strongly effervescent; moderately alkaline; clear wavy boundary.
Bk4—53 to 60 inches; pale brown (10YR 6/3) sandy loam, brown (10YR 5/3) moist; massive; soft, very friable, slightly sticky and slightly plastic; 5 percent gravel; strongly effervescent; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Calcium carbonate equivalent: 15 to 40 percent
Depth to calcic horizon: 8 to 30 inches
Depth to effervescence: 0 to 5 inches

A horizon:
Hue: 10YR or 7.5YR
Texture: sandy loam or loam

Bw, Bk1, and Bk2 horizons:
Hue: 2.5Y to 7.5YR
Texture: loam or sandy clay loam
Reaction: moderately alkaline or strongly alkaline
Rock fragment content: 0 to 15 percent

Bk3 and Bk4 horizons:
Hue: 2.5Y to 7.5YR
Texture: loam, fine sandy loam, or sandy clay loam
Rock fragment content: 5 to 35 percent

Layoint Series

Map unit(s): 120
Depth class: moderately deep
Drainage class: somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: plateaus
Position on landform: summits

Parent material: eolian deposits and residuum derived from sandstone
Elevation: 7,300 to 8,000 feet (2,225 to 2,438 meters)
Slope: 1 to 8 percent
Climatic data:
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Sandy, mixed Aridic Haploborolls

Typical Pedon

Map unit in which located: Layoint-Moosed-Berlake complex, 1 to 20 percent slopes
Location in the survey area: about 2,000 feet north and 1,100 feet east of the southwest corner of sec. 27, T. 5 N., R. 102 W.

A1—0 to 1 inch; reddish brown (5YR 5/3) loamy fine sand, dark reddish brown (5YR 3/2) moist; single grained; loose, nonsticky and nonplastic; neutral; abrupt smooth boundary.
A2—1 inch to 4 inches; reddish gray (5YR 5/2) loamy fine sand, dark reddish brown (5YR 3/2) moist; weak medium granular structure; soft, very friable, nonsticky and nonplastic; neutral; abrupt smooth boundary.
A3—4 to 8 inches; reddish gray (5YR 5/2) loamy fine sand, dark reddish brown (5YR 3/2) moist; weak medium subangular blocky structure; slightly hard, friable, nonsticky and nonplastic; neutral; clear wavy boundary.
AB—8 to 14 inches; reddish gray (5YR 5/2) loamy fine sand, dark reddish brown (5YR 3/3) moist; weak medium subangular blocky structure; slightly hard, friable, nonsticky and nonplastic; mildly alkaline; gradual wavy boundary.
Bw1—14 to 24 inches; reddish brown (5YR 5/3) loamy fine sand, reddish brown (5YR 4/3) moist; weak medium prismatic structure parting to weak medium subangular blocky; slightly hard, friable, nonsticky and nonplastic; mildly alkaline; clear wavy boundary.
Bw2—24 to 32 inches; light reddish brown (5YR 6/4) loamy fine sand, yellowish red (5YR 4/6) moist; weak medium prismatic structure parting to weak medium subangular blocky; slightly hard, friable, slightly sticky and nonplastic; 10 percent gravel; mildly alkaline; abrupt wavy boundary.
R—32 inches; reddish yellow hard sandstone bedrock.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 0 to 10 percent gravel; a thin horizon with 15 to 60 percent rock fragments is present in some pedons immediately above the bedrock
Depth to lithic contact: 24 to 40 inches
Hue: 7.5YR or 5YR
Thickness of the mollic epipedon: 8 to 15 inches

Bw horizons:
Texture: loamy fine sand or loamy sand
Reaction: neutral or mildly alkaline

Leaps Series

Map unit(s): 121
Depth class: very deep
Drainage class: well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Landform: mountainsides
Parent material: colluvium derived from shale
Elevation: 7,600 to 8,600 feet (2,316 to 2,621 meters)
Slope: 3 to 15 percent
Climatic data:
Mean annual precipitation: 20 to 22 inches (508 to 559 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Frost-free period: 50 to 75 days

Taxonomic class: Fine, montmorillonitic Typic Cryoborolls

Typical Pedon

Map unit in which located: Leaps clay loam, 3 to 15 percent slopes, very stony
Location in the survey area: about 1,500 feet east and 500 feet north of the southwest corner of sec. 36, T. 11 N., R. 90 W.

0e—0 to 1 inch; moderately decomposed leaves and twigs.
A1—1 inch to 3 inches; dark gray (10YR 4/1) clay loam, very dark gray (10YR 3/1) moist; moderate medium granular structure, soft, very friable, slightly sticky and slightly plastic; 4 percent gravel and cobbles, 2 percent stones; neutral; clear wavy boundary.
A2—3 to 15 inches; dark grayish brown (10YR 4/2) clay loam, very dark grayish brown (10YR 3/2) moist; moderate very coarse subangular blocky structure parting to weak coarse granular; slightly

hard, friable, slightly sticky and slightly plastic; 4 percent gravel and cobbles, 2 percent stones; neutral; abrupt wavy boundary.

Bw1—15 to 23 inches; variegated very pale brown (10YR 8/3) ranging to light reddish brown (5YR 6/4) clay, variegated pale brown (10YR 6/3) ranging to reddish brown (5YR 5/4) moist; moderate medium prismatic structure parting to moderate coarse angular blocky; very hard, firm, very sticky and very plastic; 4 percent gravel and cobbles, 2 percent stones; neutral; gradual wavy boundary.

BC—23 to 39 inches; variegated white (10YR 8/2) ranging to light reddish brown (5YR 6/4) clay, variegated pale brown (10YR 6/3) ranging to reddish brown (5YR 5/4) moist; moderate medium prismatic structure; very hard, firm, very sticky and very plastic; 4 percent gravel and cobbles, 2 percent stones; moderately acid; clear wavy boundary.

C—39 to 60 inches; variegated red (2.5YR 5/6), white (2.5Y 8/2), and pink (7.5YR 7/4) clay, variegated yellowish red (5YR 4/6), light gray (2.5Y 7/2) and light brown (7.5YR 6/4) moist; massive; very hard, firm, very sticky and very plastic; 5 percent 1 to 3 mm thick discontinuous light gray lenses of sand; neutral.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 0 to 10 percent
Thickness of the mollic epipedon: 7 to 15 inches

A horizon:
Reaction: slightly acid to neutral

Bw horizon:
Hue: Colors of uncrushed soil are variegated with hues of 5YR through 2.5Y; hues of crushed soil are variegated 10YR or 7.5YR
Texture: clay loam or clay
Clay content: 35 to 55 percent
Reaction: moderately acid to neutral

C horizon:
Hue: Colors of uncrushed soil are variegated with hues of 10R through 5Y; hues of crushed soil are variegated 10YR through 5YR
Texture: clay loam or clay
Clay content: 35 to 55 percent
Reaction: moderately acid to neutral

Leswill Series

Map unit(s): 122
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: concave and nearly level areas on dissected plateaus
Parent material: residuum derived from gypsiferous shale
Elevation: 6,600 to 7,200 feet (2,012 to 2,194 meters)
Slope: 1 to 7 percent
Climatic data:
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine-silty, mixed, frigid Cambic Gypsiorthids

Typical Pedon

Map unit in which located: Leswill-Rogrube complex, 1 to 7 percent slopes
Location in the survey area: about 1,000 feet south and 250 feet east of the northwest corner of sec. 28, T. 11 N., R. 100 W.

A1—0 to 2 inches; light brownish gray (2.5Y 6/2) clay loam, grayish brown (2.5Y 5/2) moist; weak medium granular structure parting to moderate fine granular; soft, very friable, slightly sticky and plastic; strongly effervescent; mildly alkaline; abrupt smooth boundary.

A2—2 to 5 inches; light brownish gray (2.5Y 6/2) clay loam, grayish brown (2.5Y 5/2) moist; weak coarse platy structure parting to weak fine subangular blocky; slightly hard, friable, slightly sticky and slightly plastic; strongly effervescent; strongly alkaline; abrupt smooth boundary.

Bw—5 to 14 inches; light brownish gray (2.5Y 6/2) clay loam, grayish brown (2.5Y 5/2) moist; weak medium subangular blocky structure; hard, friable, sticky and plastic; strongly effervescent; strongly alkaline; clear wavy boundary.

By1—14 to 20 inches; light yellowish brown (2.5Y 6/4) silty clay loam, grayish brown (2.5Y 5/2) moist; weak medium subangular blocky structure; slightly hard, friable, sticky and plastic; 4 percent calcium sulfate; slightly effervescent; moderately alkaline; clear wavy boundary.

By2—20 to 30 inches; light yellowish brown (2.5Y 6/4) silty clay loam, light olive brown (2.5Y 5/4) moist; weak medium subangular blocky structure; slightly hard, friable, sticky and plastic; 10 percent

calcium sulfate; slightly effervescent; moderately alkaline; clear wavy boundary.
Cy—30 to 41 inches; light yellowish brown (2.5Y 6/4) clay loam, light olive brown (2.5Y 5/4) moist; massive; hard, firm, sticky and plastic; 15 percent calcium sulfate; strongly effervescent; moderately alkaline; clear wavy boundary.
C1—41 to 52 inches; light yellowish brown (2.5Y 6/4) clay loam, olive brown (2.5Y 4/3) moist; massive; hard, firm, sticky and plastic; 3 percent calcium sulfate; strongly effervescent; moderately alkaline; clear wavy boundary.
C2—52 to 75 inches; light brownish gray (2.5Y 6/2) silty clay loam, grayish brown (2.5Y 5/2) moist; massive; hard, firm, slightly sticky and slightly plastic; 7 percent calcium sulfate; strongly effervescent; moderately alkaline.

Range in Characteristics

Hue: 10YR to 5Y
Note: A gypsic horizon is at a depth of 10 to 40 inches and contains 10 to 15 percent calcium sulfate. The total of the percentage of calcium sulfate plus the percentage of the calcium carbonate equivalent averages 20 to 39 percent by weight in the 10 to 40 inch depth zone.

A horizon:
Reaction: mildly alkaline to strongly alkaline

B and Cy horizons:
Texture: clay loam or silty clay loam
Reaction: moderately alkaline or strongly alkaline

C1 horizon:
Texture: silty clay loam or clay loam
Reaction: moderately alkaline or strongly alkaline

Libeg Series

Map unit(s): 83
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: concave areas on mountainsides, concave areas on plateaus
Parent material: relict fluvial deposits
Elevation: 7,000 to 8,500 feet (2,134 to 2,591 meters)
Slope: 3 to 15 percent
Climatic data:
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Frost-free period: 50 to 75 days
Taxonomic class: Loamy-skeletal, mixed Argic Cryoborolls

Typical Pedon

Map unit in which located: Forsey-Libeg complex, 3 to 25 percent slopes, very stony
Location in the survey area: about 600 feet east and 1,350 feet south of the northwest corner of sec. 17, T. 11 N., R. 102 W.

A1—0 to 5 inches; brown (7.5YR 4/2) loam, dark brown (7.5YR 3/2) moist; weak fine granular structure; soft, very friable, nonsticky and nonplastic; neutral; clear smooth boundary.
A2—5 to 12 inches; brown (7.5YR 5/2) gravelly loam, dark brown (7.5YR 3/2) moist; weak medium subangular blocky structure parting to moderate medium granular; soft, very friable, nonsticky and nonplastic; 15 percent gravel; neutral; clear smooth boundary.
BA—12 to 15 inches; brown (7.5YR 5/4) gravelly loam, dark brown (7.5YR 3/4) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and slightly plastic; 15 percent gravel; neutral; clear smooth boundary.
Bt1—15 to 21 inches; light brown (7.5YR 6/4) very gravelly sandy clay loam, brown (7.5YR 4/4) moist; moderate fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; few faint clay films on faces of peds; 25 percent gravel, 10 percent cobbles; slightly acid; clear wavy boundary.
Bt2—21 to 35 inches; brown (7.5YR 5/4) very gravelly sandy clay loam, brown (7.5YR 4/4) moist; moderate medium and coarse subangular blocky structure; slightly hard, friable, sticky and plastic; few faint clay films on faces of peds; 30 percent gravel, 15 percent cobbles; slightly acid; gradual wavy boundary.
BC—35 to 43 inches; brown (7.5YR 5/4) extremely cobbly sandy clay loam, brown (7.5YR 4/4) moist; moderate medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; 35 percent gravel, 25 percent cobbles; slightly acid; gradual wavy boundary.
C—43 to 60 inches; brown (7.5YR 5/4) extremely cobbly sandy loam, brown (7.5YR 4/4) moist; massive; soft, very friable, nonsticky and nonplastic; 35 percent gravel, 30 percent cobbles; neutral.

Range in Characteristics

Depth to effervescence: 40 inches or more
Thickness of the mollic epipedon: 10 to 15 inches

A horizon:
Hue: 7.5YR or 10YR

Bt horizon:
Hue: 5YR or 7.5YR
Rock fragment content: 35 to 60 percent
Reaction: slightly acid or neutral

C horizon:
Hue: 5YR or 7.5YR
Rock fragment content: 50 to 70 percent
Reaction: neutral or mildly alkaline

Lilsnake Series

Map unit(s): 123
Depth class: shallow
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: hillslopes, plateaus
Parent material: residuum derived from sandstone
Elevation: 6,000 to 7,000 feet (1,829 to 2,134 meters)
Slope: 3 to 20 percent
Climatic data:
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Loamy, mixed, frigid Lithic Calciorthids

Typical Pedon

Map unit in which located: Lilsnake-Sandwash complex, 3 to 20 percent slopes
Location in the survey area: about 500 feet south and 1,500 feet east of the northwest corner of sec. 2, T. 8 N., R. 97 W.

A—0 to 4 inches; very pale brown (10YR 7/3) loam, dark yellowish brown (10YR 4/4) moist; weak fine granular structure; soft, very friable, slightly sticky and slightly plastic; violently effervescent; moderately alkaline; clear smooth boundary.
Bk—4 to 15 inches; very pale brown (10YR 7/4) loam, yellowish brown (10YR 5/4) moist; weak medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; 45 percent calcium carbonate equivalent; violently effervescent; moderately alkaline; gradual smooth boundary.
C—15 to 19 inches; very pale brown (10YR 7/4) gravelly clay loam, yellowish brown (10YR 5/4) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; 20 percent gravel; 10 percent calcium carbonate equivalent; violently effervescent; moderately alkaline; abrupt wavy boundary.
2R—19 inches; hard sandstone bedrock.

Range in Characteristics

Calcium carbonate equivalent: 25 to 40 percent
Depth to effervescence: throughout
Depth to lithic contact: 10 to 20 inches
Hue: 2.5Y or 10YR

Bk horizon:
Texture: loam or clay loam

C horizon:
Texture: loam, gravelly loam, or gravelly clay loam

Losee Series

Map unit(s): 124
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: convex windswept areas on mountainsides
Parent material: colluvium derived from relict fluvial deposits
Elevation: 7,500 to 9,500 feet (2,286 to 2,896 meters)
Slope: 25 to 65 percent
Climatic data:
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Frost-free period: 50 to 75 days

Taxonomic class: Loamy-skeletal, mixed Typic Cryochrepts

Typical Pedon

Map unit in which located: Losee-Thornburgh, dry, complex, 25 to 65 percent slopes
Location in the survey area: about 200 feet north and 350 feet east of the southwest corner of sec. 3, T. 11 N., R. 102 W.

A—0 to 5 inches; brown (7.5YR 4/2) very cobbly sandy loam, dark brown (7.5YR 3/2) moist; weak fine granular structure; soft, very friable, nonsticky and nonplastic; 15 percent gravel, 25 percent cobbles, 15 percent stones; mildly alkaline; clear wavy boundary.
Bw1—5 to 12 inches; brown (7.5YR 5/4) very cobbly sandy clay loam, dark brown (7.5YR 4/4) moist; weak medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; 15 percent gravel, 25 percent cobbles, 15

percent stones; mildly alkaline; clear wavy boundary.
Bw2—12 to 24 inches; light brown (7.5YR 6/4) very cobbly sandy clay loam, brown (7.5YR 5/4) moist; weak medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; 15 percent gravel, 25 percent cobbles, 15 percent stones; mildly alkaline; clear wavy boundary.
Bk1—24 to 32 inches; pink (7.5YR 7/4) very cobbly sandy clay loam, light brown (7.5YR 6/4) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; 15 percent gravel, 25 percent cobbles, 15 percent stones; thin pendants of calcium carbonate on underside of rock fragments; slightly effervescent; mildly alkaline; clear wavy boundary.
Bk2—32 to 40 inches; pink (7.5YR 7/4) very cobbly sandy clay loam, light brown (7.5YR 6/4) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; 15 percent gravel, 25 percent cobbles, 15 percent stones; calcium carbonate in common fine threads and as coatings on rock fragments; strongly effervescent; mildly alkaline; gradual wavy boundary.
Bk3—40 to 60 inches; light brown (7.5YR 6/4) very cobbly sandy loam, brown (7.5YR 5/4) moist; massive; soft, friable, slightly sticky and slightly plastic; 15 percent gravel, 25 percent cobbles, 15 percent stones; calcium carbonate in common fine threads and as coatings or rock fragments; strongly effervescent; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 20 to 30 percent
Rock fragment content: 35 to 60 percent
Depth to effervescence: 15 to 30 inches

Mack Series

Map unit(s): 6
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: noneroded fan terraces
Parent material: eolian deposits
Elevation: 5,500 to 6,500 feet (1,676 to 1,981 meters)
Slope: 1 to 12 percent
Climatic data:
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Frost-free period: 90 to 105 days

Taxonomic class: Fine-loamy, mixed, mesic Typic Haplargids

Typical Pedon

Map unit in which located: Avalon-Mack complex, 1 to 12 percent slopes
Location in the survey area: about 1,000 feet north and 1,000 feet east of the southwest corner of sec. 7, T. 3 N., R. 102 W.

A—0 to 2 inches; brown (7.5YR 5/3) loam, dark brown (7.5YR 3/3) moist; weak medium platy structure parting to weak very thin platy; soft, friable, slightly sticky and slightly plastic; 10 percent gravel; mildly alkaline; abrupt smooth boundary.
AB—2 to 4 inches; brown (7.5YR 5/4) loam, dark brown (7.5YR 4/4) moist; weak medium subangular blocky structure parting to moderate fine granular; slightly hard, friable, sticky and plastic; 5 percent gravel; mildly alkaline; clear smooth boundary.
Bt—4 to 13 inches; brown (7.5YR 5/4) clay loam, dark brown (7.5YR 4/4) moist; moderate medium subangular blocky structure parting to strong fine subangular blocky; hard, firm, sticky and plastic; few faint clay films on faces of peds; 5 percent gravel; mildly alkaline; clear smooth boundary.
Btk—13 to 20 inches; light brown (7.5YR 6/4) clay loam, brown (7.5YR 5/4) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; hard, firm, sticky and plastic; very few faint clay films on faces of peds; 5 percent gravel; common fine irregular soft masses of calcium carbonate, 15 percent calcium carbonate equivalent; strongly effervescent; moderately alkaline; gradual smooth boundary.
Bk1—20 to 30 inches; pinkish white (7.5YR 8/2) loam, pink (7.5YR 7/4) moist; massive; slightly hard, friable, sticky and plastic; 5 percent gravel; disseminated calcium carbonate, 40 percent calcium carbonate equivalent; violently effervescent; strongly alkaline; gradual smooth boundary.
Bk2—30 to 42 inches; pinkish white (7.5YR 8/2) loam, pink (7.5YR 7/4) moist; massive; slightly hard, friable, sticky and plastic; 5 percent gravel; disseminated calcium carbonate, 40 percent calcium carbonate equivalent; violently

effervescent; strongly alkaline; gradual smooth boundary.
Bk3—42 to 55 inches; light yellowish brown (10YR 6/4) gravelly loam, yellowish brown (10YR 5/4) moist; massive; slightly hard, friable, sticky and plastic; 15 percent gravel; common fine irregular soft masses of calcium carbonate, 12 percent calcium carbonate equivalent; violently effervescent; strongly alkaline; gradual smooth boundary.
Bk4—55 to 60 inches; pale brown (10YR 6/3) gravelly clay loam, brown (10YR 5/3) moist; massive; slightly hard, friable, sticky and plastic; 15 percent gravel; common fine irregular soft masses of calcium carbonate, 13 percent calcium carbonate equivalent; violently effervescent; strongly alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 0 to 10 percent gravel
Calcium carbonate equivalent: 20 to 40 percent
Depth to argillic horizon: 20 to 30 inches
Depth to calcic horizon: 10 to 30 inches
Depth to effervescence: 10 to 20 inches

Bk1 and Bk2 horizons:
Texture: loam or clay loam
Reaction: moderately alkaline or strongly alkaline

Bk3 and Bk4 horizons:
Texture: gravelly loam, gravelly clay loam, or loam
Rock fragment content: 0 to 25 percent gravel
Reaction: moderately alkaline or strongly alkaline

Mantlemine Series

Map unit(s): 234, 235
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: structural benches
Position on landform: footslopes, toeslopes
Parent material: alluvium and/or residuum weathered from limestone and sandstone
Elevation: 6,000 to 7,800 feet (1,829 to 2,377 meters)
Slope: 1 to 12 percent
Climatic data:
Mean annual precipitation: 12 to 15 inches (305 to 381 millimeters)
Mean annual air temperature: 42 to 46 degrees F. (5.6 to 7.8 degrees C.)
Frost-free period: 75 to 95 days
Taxonomic class: Fine-loamy, mixed, superactive, frigid Calcidic Haplustalfs

Typical Pedon

Map unit in which located: Mantlemine loam, 1 to 8 percent slopes, from the Dinosaur National Monument Soil Survey
Location in the Dinosaur National Monument survey area: about 2,000 feet west and 3,900 feet north of the southeast corner, section 13, T. 6 N., R. 106 W., NMPM latitude 40 degrees, 20 minutes, 30 seconds N. and longitude 108 degrees, 1 minute 49 seconds W.

The soil surface is covered with sandstone rock fragments consisting of 5 percent gravel.

A1—0 to 2 inches; brown (7.5YR 5/4) loam, dark brown (7.5YR 3/4) moist; moderate thin and medium platy structure parting to weak very fine granular; soft, very friable, slightly sticky and slightly plastic; many very fine and fine roots; few very fine tubular pores; neutral; abrupt smooth boundary.
A2—2 to 5 inches; brown (7.5YR 4/4) loam, dark brown (7.5YR 3/4) moist; moderate medium angular blocky structure parting to weak thick platy; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine roots; common very fine tubular pores; neutral; abrupt smooth boundary.
Bt—5 to 20 inches; brown (7.5YR 4/4) clay loam, dark brown (7.5YR 3/4) moist; moderate medium and coarse subangular blocky structure; hard, firm, sticky and plastic; common fine roots; common very fine tubular pores; few distinct clay films on faces of peds; slightly alkaline; abrupt smooth boundary.
Btk—20 to 25 inches; brown (7.5YR 5/4) clay loam, brown (7.5YR 4/4) moist; moderate medium subangular blocky structure; very hard, firm, sticky and plastic; few fine roots; common very fine tubular pores; very few faint clay films on faces of peds; calcium carbonate is disseminated; strongly effervescent; 9 percent calcium carbonate equivalent; moderately alkaline; clear smooth boundary.
Bk1—25 to 45 inches; light brown (7.5YR 6/3) clay loam, brown (7.5YR 5/3) moist; moderate fine and medium subangular blocky structure; very hard, firm, sticky and plastic; few fine roots; few very fine tubular pores; common fine irregular soft masses of calcium carbonate throughout; violently effervescent; 19 percent calcium

carbonate equivalent; strongly alkaline; clear smooth boundary.
Bk2—45 to 60 inches; brown (7.5YR 5/4) loam, brown (7.5YR 4/4) moist; massive; hard, firm, sticky and plastic; few fine roots; few fine tubular pores; calcium carbonate is disseminated; strongly effervescent; 11 percent calcium carbonate equivalent; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 18 to 35 percent
Calcium carbonate equivalent: 15 to 25 percent
Depth to argillic horizon: 10 to 30 inches
Depth to calcic horizon: 15 to 30 inches
Depth to carbonates: 8 to 25 inches

A horizon:
Value: 4 to 6 dry, 3 or 4 moist
Chroma: 2 to 4
Texture: loam or fine sandy loam
Reaction: neutral or slightly alkaline

Bt horizon:
Value: 4 to 6 dry, 3 or 4 moist
Chroma: 2 to 4
Texture: clay loam, silt loam, or loam
Reaction: neutral or slightly alkaline

Btk horizon:
Value: 5 to 7 dry, 4 to 6 moist
Chroma: 2 to 4
Texture: clay loam, silt loam, or loam
Reaction: slightly alkaline or moderately alkaline

Bk horizon:
Value: 5 to 7 dry, 4 to 6 moist
Chroma: 2 to 6
Texture: clay loam, silt loam, or loam
Reaction: slightly alkaline or moderately alkaline

Massadona Series

Map unit(s): 125, 126
Depth class: very deep
Drainage class: well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Landform: alluvial fans, hills
Position on landform: toeslopes
Parent material: alluvium derived from shale
Elevation: 5,400 to 6,300 feet (1,646 to 1,920 meters)
Slope: 0 to 12 percent
Climatic data:
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Frost-free period: 90 to 105 days

Taxonomic class: Fine, montmorillonitic, mesic Typic Camborthids

Typical Pedon

Map unit in which located: Massadona silty clay loam, 0 to 12 percent slopes
Location in the survey area: about 1,600 feet west and 2,300 feet south of the northeast corner of sec. 30, T. 4 N., R. 99 W.

A—0 to 3 inches; light gray (10YR 7/2) silty clay loam, pale brown (10YR 6/3) moist; weak thin platy structure parting to moderate fine granular; slightly hard, very friable, very sticky and plastic; strongly effervescent; moderately alkaline; abrupt smooth boundary.
BA—3 to 11 inches; light gray (2.5Y 7/2) silty clay, light yellowish brown (2.5Y 6/4) moist; moderate fine subangular blocky structure parting to moderate very fine subangular blocky; hard, friable, very sticky and plastic; strongly effervescent; moderately alkaline; clear smooth boundary.
Bw—11 to 26 inches; light gray (2.5Y 7/2) silty clay, light yellowish brown (2.5Y 6/4) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; hard, friable, very sticky and plastic; strongly effervescent; moderately alkaline; gradual smooth boundary.
BCk—26 to 50 inches; light gray (2.5Y 7/2) silty clay, light yellowish brown (2.5Y 6/4) moist; weak medium subangular blocky structure parting to moderate fine subangular blocky; hard, friable, very sticky and plastic; calcium carbonate in filaments; strongly effervescent; moderately alkaline; clear smooth boundary.
Cy—50 to 60 inches; light gray (2.5Y 7/2) silty clay, light yellowish brown (2.5Y 6/4) moist; massive; slightly hard, friable, very sticky and plastic; common nests of gypsum; strongly effervescent; moderately alkaline.

Range in Characteristics

Depth to effervescence: on the surface
Depth to secondary calcium carbonate: 16 to 36 inches

Bw and Bk horizons:
Hue: 10YR or 2.5Y
Texture: clay, silty clay, or silty clay loam

C horizon:
Hue: 10YR or 2.5Y
Texture: clay, silty clay, or silty clay loam
Reaction: moderately alkaline or strongly alkaline

Maudlin Series

Map unit(s): 127
Depth class: moderately deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: plateaus
Parent material: residuum derived from sandstone
Elevation: 6,500 to 8,000 feet (1,981 to 2,438 meters)
Slope: 3 to 15 percent
Climatic data:
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Frost-free period: 65 to 85 days

Taxonomic class: Fine-loamy, mixed Typic Argiborolls

Typical Pedon

Map unit in which located: Maudlin-Duffymont complex, 3 to 15 percent slopes, very stony
Location in the survey area: about 230 feet north and 70 feet west of the southeast corner of sec. 14, T. 5 N., R. 92 W.

A1—0 to 4 inches; dark brown (10YR 4/3) fine sandy loam, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure parting to moderate medium granular; soft, very friable, slightly sticky and slightly plastic; neutral; clear smooth boundary.
A2—4 to 8 inches; grayish brown (10YR 5/2) fine sandy loam, very dark grayish brown (10YR 3/2) moist; moderate medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; neutral; clear smooth boundary.
A3—8 to 12 inches; brown (10YR 5/3) fine sandy loam, dark brown (10YR 3/3) moist; moderate medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; neutral; clear wavy boundary.
Bt—12 to 21 inches; yellowish brown (10YR 5/6) sandy clay loam, yellowish brown (10YR 5/4) moist; moderate medium subangular blocky structure; very hard, friable, sticky and plastic; common distinct clay films on faces of peds; neutral; clear wavy boundary.
BC—21 to 30 inches; light yellowish brown (10YR 6/4) gravelly fine sandy loam, dark yellowish brown (10YR 4/4) moist; weak fine subangular blocky structure; hard, friable, slightly sticky and slightly plastic; 30 percent gravel; neutral; clear smooth boundary.
R—30 inches; hard sandstone bedrock.

Range in Characteristics

Depth to argillic horizon: 18 to 35 inches
Depth to lithic contact: 20 to 40 inches
Hue: 10YR or 7.5YR
Thickness of the mollic epipedon: 8 to 14 inches

Bt horizon:
Texture: fine sandy loam, loam, or sandy clay loam
Rock fragment content: 0 to 15 percent
Reaction: neutral or mildly alkaline

BC horizon:
Texture: gravelly fine sandy loam, loam, or sandy clay loam
Rock fragment content: 0 to 35 percent
Reaction: neutral or mildly alkaline

Maybell Series

Map unit(s): 86, 128, 129, 174, 180
Depth class: very deep
Drainage class: excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Landform: breaks, hills, dunes on plateaus
Position on landform: footslopes, toeslopes
Parent material: eolian deposits, eolian deposits derived from sandstone; local alluvium and eolian deposits derived from sandstone
Elevation: 6,000 to 7,300 feet (1,829 to 2,225 meters)
Slope: 1 to 45 percent
Climatic data:
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Mixed, frigid Ustic Torripsamments

Typical Pedon

Map unit in which located: Maybell sand, 3 to 12 percent slopes
Location in the survey area: about 1,500 feet east and 100 feet north of southwest corner of sec. 23, T. 6 N., R. 96 W.

A—0 to 3 inches; light brownish gray (10YR 6/2) sand, dark grayish brown (10YR 4/2) moist; weak

medium granular structure; loose, nonsticky and nonplastic; neutral; abrupt smooth boundary.
AB—3 to 8 inches; brown (10YR 5/3) loamy sand, dark grayish brown (10YR 4/2) moist; weak medium prismatic structure parting to weak coarse subangular blocky; soft, very friable, nonsticky and nonplastic; neutral; clear wavy boundary.
Bw—8 to 20 inches; brown (7.5YR 5/3) loamy sand, dark brown (7.5YR 4/3) moist; weak coarse subangular blocky structure; soft, very friable, nonsticky and nonplastic; neutral; diffuse wavy boundary.
C1—20 to 35 inches; light yellowish brown (10YR 6/4) sand, yellowish brown (10YR 5/4) moist; single grained; loose, nonsticky and nonplastic; neutral; diffuse wavy boundary.
C2—35 to 60 inches; very pale brown (10YR 7/4) sand, light yellowish brown (10YR 6/4) moist; single grained; loose, nonsticky and nonplastic; mildly alkaline.

Range in Characteristics

Depth to effervescence: 40 or more inches
Hue: 10YR or 7.5YR
Note: The Bw horizon is absent in some pedons.

A horizon:
Texture: sand or loamy fine sand

C horizon:
Texture: sand, fine sand, loamy fine sand, or loamy sand

Maysprings Series

Map unit(s): 14, 82, 107, 130, 131, 183
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: hills, hillslopes, plateaus
Position on landform: summits, backslopes, footslopes, toeslopes
Parent material: alluvium and residuum derived from sandstone
Elevation: 6,200 to 7,300 feet (1,890 to 2,225 meters)
Slope: 3 to 20 percent
Climatic data:
Mean annual precipitation: 11 to 15 inches (279 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine-loamy, mixed Borollic Haplargids

Typical Pedon

Map unit in which located: Maysprings coarse sandy loam, 3 to 12 percent slopes
Location in the survey area: about 100 feet west and 1,350 feet south of the northeast corner of sec. 22, T. 10 N., R. 94 W.

A—0 to 4 inches; dark brown (10YR 4/3) coarse sandy loam, very dark grayish brown (10YR 3/2) moist; weak coarse granular structure; soft, very friable, nonsticky and nonplastic; neutral; clear smooth boundary.
AB—4 to 7 inches; brown (10YR 5/3) coarse sandy loam, dark brown (10YR 4/3) moist; weak coarse subangular blocky structure parting to weak fine granular; soft, very friable, slightly sticky and slightly plastic; neutral; clear wavy boundary.
Bt1—7 to 15 inches; brown (7.5YR 5/4) sandy clay loam, dark brown (7.5YR 4/4) moist; moderate coarse subangular blocky structure; hard, friable, sticky and plastic; common distinct clay films on faces of peds and in pores; neutral; gradual wavy boundary.
Bt2—15 to 22 inches; yellowish brown (10YR 5/4) coarse sandy loam, dark yellowish brown (10YR 4/4) moist; moderate medium subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; common distinct clay films on faces of peds and in pores; neutral; gradual wavy boundary.
BC—22 to 34 inches; light yellowish brown (10YR 6/4) coarse sandy loam, yellowish brown (10YR 5/4) moist; weak medium subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; mildly alkaline; clear wavy boundary.
C—34 to 60 inches; yellow (10YR 8/6) coarse sand, yellow (10YR 7/6) moist; single grained; loose, nonsticky and nonplastic; mildly alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 18 to 27 percent
Depth to argillic horizon: 15 to 35 inches

Depth to secondary calcium carbonate: 40 inches or more

A horizon:
Texture: coarse sandy loam or loamy coarse sand
Reaction: neutral or mildly alkaline

Bt horizon:
Hue: 7.5YR or 10YR
Texture: sandy clay loam or coarse sandy loam
Reaction: neutral or mildly alkaline

C horizon:
Hue: 10YR or 2.5Y
Texture: loamy coarse sand, coarse sand, or gravelly coarse sand
Rock fragment content: 5 to 20 percent fine gravel
Reaction: neutral or mildly alkaline above a depth of 40 inches; mildly alkaline or moderately alkaline below a depth of 40 inches

Mellenthin Series

Map unit(s): 248
Depth class: very shallow to shallow
Drainage class: well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: fan remnants, structural benches
Position on landform: backslopes, footslopes
Parent material: colluvium over residuum weathered from limestone and sandstone
Elevation: 5,500 to 6,500 feet (1,676 to 1,981 meters)
Slope: 3 to 45 percent
Climatic data:
Mean annual precipitation: 10 to 12 inches (254 to 305 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Frost-free period: 90 to 105 days

Taxonomic class: Loamy-skeletal, mixed, superactive, mesic Lithic Ustic Haplocalcids

Typical Pedon

Map unit in which located: of Strych-Mellenthin complex, 3 to 45 percent slopes, very bouldery, from the Dinosaur National Monument Soil Survey
Location in the Dinosaur National Monument survey area: about 3,200 feet east and 3,100 feet north of the northeast corner, section 16, T. 6 N., R. 101 W., NMPM (site is in a non-sectioned area) latitude 40 degrees, 29 minutes, 15 seconds N, and longitude 108 degrees, 43 minutes, 36 seconds W.

The soil surface is covered with limestone and sandstone rock fragments, consisting of 10 percent gravel, 10 percent cobbles, 8 percent stones, and 2 percent boulders.

A—0 to 2 inches; brown (7.5YR 5/4) very stony sandy loam, brown (7.5YR 4/3) moist; weak fine granular structure; soft, very friable, slightly sticky and slightly plastic; 10 percent gravel, 15 percent cobbles, and 10 percent stones; many fine and medium roots; few fine tubular pores; calcium carbonate is disseminated; 20 percent calcium carbonate equivalent; strongly effervescent; slightly alkaline; clear wavy boundary.
Bk—2 to 12 inches; brown (7.5YR 5/4) very stony sandy loam, brown (7.5YR 4/4) moist; weak fine subangular blocky structure parting to weak fine granular; many fine and medium roots; few fine tubular pores; 15 percent gravel, 15 percent cobbles, and 10 percent stones; few fine calcium carbonate threads; strongly effervescent; 28 percent calcium carbonate equivalent; moderately alkaline; abrupt irregular boundary.
R—12 inches; hard sandstone.

Range in Characteristics

Particle-size control section (weighted average):
Content of rock fragments: 35 to 70 percent
Depth to bedrock: 8 to 20 inches

A horizon:
Hue: 5YR or 7.5YR
Value: 4 or 5 dry, 3 or 4 moist
Chroma: 3 to 5
Reaction: slightly alkaline or moderately alkaline

Bk horizon:
Hue: 5YR or 7.5YR
Value: 5 to 7 dry, 4 to 6 moist
Chroma: 3 to 6
Texture: sandy loam, fine sandy loam, or loam modified by 35 to 70 percent gravel, cobbles, or stones
Reaction: moderately alkaline or strongly alkaline

Mespun Series

Map unit(s): 226
Depth class: very deep
Drainage class: excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Landform: fan remnants, hillslopes

Position on landform: footslopes, toeslopes
Parent material: eolian deposits
Elevation: 5,100 to 6,000 feet (1,554 to 1,829 meters)
Slope: 4 to 25 percent
Climatic data:
Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Frost-free period: 110 to 140 days

Taxonomic class: Siliceous, mesic Ustic Torripsamments

Typical Pedon

Map unit in which located: Arches-Mespun-Rock outcrop complex, 4 to 40 percent slopes, from the Dinosaur National Monument Soil Survey
Location in the Dinosaur National Monument survey area: about 1,900 feet west and 600 feet north of the northeast corner of section 28, T. 4 S., R. 23 E., SLBM (site is in a non-sectioned area) latitude 40 degrees, 27 minutes, 8 seconds N. and longitude 109 degrees, 21 minutes, 36 seconds W.

A—0 to 3 inches; light brown (7.5YR 6/4) fine sand, brown (7.5YR 5/4) moist; weak thin platy structure; soft, loose, nonsticky and nonplastic; few very fine, fine, medium, and coarse roots; few very fine and fine tubular pores; slightly alkaline; abrupt smooth boundary.
C1—3 to 8 inches; light brown (7.5YR 6/4) fine sand, brown (7.5YR 5/4) moist; massive; soft, loose, nonsticky and nonplastic; few very fine, fine, and medium roots; many very fine, common fine, and few medium tubular pores; slightly alkaline; clear wavy boundary.
C2—8 to 19 inches; 8 to 19 inches; light brown (7.5YR 6/4) fine sand, brown (7.5YR 5/4) moist; massive; soft, loose, nonsticky and nonplastic; many very fine, common fine, and few medium roots; very fine, common fine, and few medium tubular pores; slightly alkaline; abrupt smooth boundary.
C3—19 to 21 inches; light brown (7.5YR 6/4) fine sand, brown (7.5YR 4/4) moist; massive; soft, loose, nonsticky and nonplastic; many very fine, common fine, and few medium roots; many very fine, common fine, and few medium tubular pores; moderately alkaline; abrupt smooth boundary.
C4—21 to 37 inches; light brown (7.5YR 6/4) fine sand, brown (7.5YR 5/4) moist; massive; soft, loose, nonsticky and nonplastic; few very fine, fine, and medium roots; common very fine, few fine tubular pores; moderately alkaline; clear smooth boundary.
C5—37 to 49 inches; light brown (7.5YR 6/4) fine sand, brown (7.5YR 5/4) moist; massive; soft, loose, nonsticky and nonplastic; few very fine and fine roots; common very fine, few fine tubular pores; moderately alkaline; gradual smooth boundary.
C6—49 to 60 inches; light brown (7.5YR 6/4) fine sand, brown (7.5YR 5/4) moist; massive; soft, loose, nonsticky and nonplastic; few very fine and fine roots; common very fine, few fine tubular pores; moderately alkaline.

Range in Characteristics

A horizon:
Value: 5 or 6 dry, 3 to 5 moist
Chroma: 3 to 6
Reaction: neutal to moderately alkaline

C horizon:
Hue: 5YR or 7.5YR
Value: 4 to 7 dry, 3 to 5 moist
Chroma: 4 to 8
Texture: loamy fine sand or fine sand
Reaction: neutral to moderately alkaline

Mido Series

Map unit(s): 236
Depth class: very deep
Drainage class: excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Landform: hills
Position on landform: toeslopes
Parent material: alluvium
Elevation: 5,350 to 5,950 feet (1,631 to 1,814 meters)
Slope: 3 to 12 percent
Climatic data:
Mean annual precipitation: 10 to 12 inches (254 to 305 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Frost-free period: 90 to 105 days

Taxonomic class: Mixed, mesic Ustic Torripsamments

Typical Pedon

Map unit in which located: Mido loamy fine sand, 3 to 12 percent slopes, from the Dinosaur National Monument Soil Survey
Location in the Dinosaur National Monument survey area: about 3,350 feet west and 1,675 feet north

of the southeast corner, section 16, T. 9 N., R. 102 W., NMPM latitude 40 degrees, 44 minutes, 12 seconds N. and longitude 108 degrees, 57 minutes, 8 seconds W.

A—0 to 8 inches; light brown (7.5YR 6/3) loamy fine sand, brown (7.5YR 5/3) moist; single grained; loose; many very fine roots; few very fine interstitial pores; calcium carbonate is disseminated; strongly effervescent; slightly alkaline; gradual smooth boundary.

C—8 to 60 inches; light brown (7.5YR 6/3) loamy fine sand, light brown (7.5YR 6/3) moist; massive; loose; few very fine roots; few very fine tubular pores; calcium carbonate is disseminated; strongly effervescent; slightly alkaline.

Range in Characteristics

A horizon:

Value: 5 or 6 dry, 4 or 5 moist
Chroma: 2 to 4

C horizon:

Value: 5 or 6 dry, 4 or 5 moist
Chroma: 2 to 4

Mikim Taxadjunct

Map unit(s): 237, 264, 265
Local phase(s): silt loam, loam
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: alluvial fans, alluvial flats
Parent material: alluvium, alluvium derived from sandstone, limestone, shale, and quartzite
Elevation: 5,000 to 6,800 feet (1,524 to 2,073 meters)
Slope: 1 to 15 percent
Climatic data:
Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Frost-free period: 110 to 140 days

Taxonomic class: Fine-loamy, mixed, superactive, mesic Ustic Haplocambids

Typical Pedon

Map unit in which located: Mikim loam, 3 to 15 percent slopes, from the Uintah Area, Utah Soil Survey
Location in the Uintah Area, Utah survey area: about 3 miles west of Maeser; about 700 feet north and 1,800 feet east of the southwest corner of sec. 13, T. 4 S., R. 20 E., SLBM; Vernal N.W., Utah USGS quadrangle; latitude 40 degrees, 27 minutes, 31 seconds north and longitude 109 degrees, 37 minutes, 50 seconds west; NAD 27.

A1—0 to 2 inches; light yellowish brown (10YR 6/4) loam, yellowish brown (10YR 5/4) moist; strong medium and thin platy structure parting to moderate very fine subangular blocky; slightly hard, friable, slightly sticky and moderately plastic; few coarse, medium, fine, and very fine roots; few fine, common very fine random tubular pores; slightly effervescent; 5 percent calcium carbonate equivalent; calcium carbonate is disseminated; strongly alkaline (pH 8.7); abrupt smooth boundary.

A2—2 to 6 inches; pale brown (10YR 6/3) loam, brown (10YR 4/3) moist; weak thick platy structure parting to weak fine and very fine subangular blocky; hard, firm, moderately sticky and moderately plastic; few coarse, medium, fine, and very fine roots; few medium and fine common very fine random tubular pores; slightly effervescent; 6 percent calcium carbonate equivalent; calcium carbonate is disseminated; strongly alkaline (pH 8.6); abrupt smooth boundary.

Bk1—6 to 12 inches; light yellowish brown (2.5Y 6/4) clay loam, light olive brown (2.5Y 5/4) moist; weak medium prismatic structure parting to moderate medium and fine subangular blocky; slightly hard, firm, moderately sticky and moderately plastic; few medium, fine, and very fine roots; few medium, common fine and very fine random tubular pores; slightly effervescent; 7 percent calcium carbonate equivalent; calcium carbonate is disseminated and in few fine filaments; strongly alkaline (pH 9.0); clear smooth boundary.

Bk2—12 to 25 inches; light yellowish brown (10YR 6/4) loam, brown (10YR 4/3) moist; moderate medium prismatic structure parting to moderate medium and fine subangular blocky; hard, firm, moderately sticky and moderately plastic; few fine and very fine roots; few medium and fine, common very fine random tubular pores; slightly effervescent; 10 percent calcium carbonate equivalent; calcium carbonate is disseminated and in few medium veins and masses; strongly alkaline (pH 8.9); gradual wavy boundary.

Bk3—25 to 43 inches; light yellowish brown (10YR 6/4) loam, brown (10YR 5/3) moist; moderate medium prismatic structure parting to moderate medium and fine subangular blocky; very hard,

firm, moderately sticky and moderately plastic; few fine and very fine roots; few medium common fine and very fine random tubular pores; slightly effervescent; 8 percent calcium carbonate equivalent; calcium carbonate is disseminated and in few fine filaments and veins; strongly alkaline (pH 9.0); gradual smooth boundary.

Bk4—43 to 60 inches; light yellowish brown (10YR 6/4) loam, yellowish brown (10YR 5/4) moist; weak coarse and medium subangular blocky structure parting to moderate fine subangular blocky; hard, firm, moderately sticky and moderately plastic; few fine and very fine roots; few medium, common fine and very fine random tubular pores; slightly effervescent; 10 percent calcium carbonate equivalent; calcium carbonate is disseminated and segregated as few very fine masses; strongly alkaline (pH 9.0).

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 18 to 35 percent
Average annual soil temperature: 47 to 51 degrees F.
Electrical conductivity (mmhos/cm): 0 to 8
Moisture control section: is affected by precipitation that falls evenly throughout the year with a slight increase in late summer and fall
Moisture regime: aridic bordering on ustic
Reaction: moderately alkaline or strongly alkaline
Note: The Mikim series as used in this survey is a taxadjunct to the Mikim series. It has a cambic horizon, secondary calcium carbonate, and classifies as fine-loamy, mixed, superactive, mesic Ustic Haplocambids. Use and management is similar to the Mikim series.

A horizon:
Hue: 10YR or 2.5Y
Value: 5 to 7 dry, 4 to 6 moist
Chroma: 2 to 4 dry or moist
Texture: loam or silt loam
Calcium carbonate equivalent: 5 to 10 percent
Sodium adsorption ratio: 0 to 15
Reaction: moderately alkaline or strongly alkaline

Bk horizon:
Hue: 10YR or 2.5Y
Value: 5 to 7 dry, 4 to 6 moist
Chroma: 2 to 4 dry or moist
Texture: loam, clay loam, or stratified thin layers of sandy loam to clay loam
Rock fragment content: 0 to 15 percent gravel and cobbles
Calcium carbonate equivalent: 5 to 15 percent
Gypsum: 0 to 2 percent
Sodium adsorption ratio: 0 to 15

Milok Series

Map unit(s): 238, 239, 240
Depth class: very deep
Drainage class: well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: fan remnants, hillslopes
Position on landform: backslopes, footslopes
Parent material: eolian deposits over alluvium and/or colluvium
Elevation: 4,800 to 6,400 feet (1,463 to 1,951 meters)
Slope: 3 to 65 percent
Climatic data:
Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Frost-free period: 90 to 140 days

Taxonomic class: Coarse-loamy, mixed, superactive, mesic Ustic Haplocalcids

Typical Pedon

Map unit in which located: Milok-Strych complex, 3 to 25 percent slopes, very stony, from the Dinosaur National Monument Soil Survey
Location in the Dinosaur National Monument survey area: about 1,900 feet south and 500 feet west of the northeast corner of section 32, T. 3 S., R. 25 E., SLBM latitude 40 degrees, 31 minutes, 3 seconds N. and longitude 109 degrees, 7 minutes, 39 seconds W.

A—0 to 6 inches; brown (7.5YR 5/4) fine sandy loam; brown (7.5YR 4/4) moist; weak medium and fine subangular blocky structure; soft, very friable, nonsticky and nonplastic; many very fine, common fine, few medium and coarse roots; many very fine, common fine, few medium tubular and interstitial pores; calcium carbonate is disseminated; very slightly effervescent; 1 percent calcium carbonate equivalent; moderately alkaline; clear smooth boundary.

Bw—6 to 12 inches; light brown (7.5YR 6/4) loam; brown (7.5YR 4/4) moist; moderate medium subangular blocky structure parting to moderate fine and very fine subangular blocky; slightly hard, friable, slightly sticky and slightly plastic; common very fine, few fine and medium roots; many very fine, few fine tubular pores; calcium

carbonate is disseminated and in few fine irregular soft masses; slightly effervescent; 10 percent calcium carbonate equivalent; strongly alkaline; clear wavy boundary.

Bk1—12 to 24 inches; light brown (7.5YR 6/4) loam; brown (7.5YR 4/4) moist; moderate medium subangular blocky structure parting to moderate fine and very fine subangular blocky; few very fine and fine roots; common very fine tubular pores; few 1/4 to 1/2 inch krotovinas; calcium carbonate is disseminated in many medium and fine irregular soft masses; strongly effervescent; 13 percent calcium carbonate equivalent; strongly alkaline; gradual wavy boundary.

Bk2—24 to 37 inches; pink (7.5YR 7/4) loam; brown (7.5YR 4/4) moist; weak medium subangular blocky structure parting to weak fine and very fine subangular blocky; hard, friable, slightly sticky and slightly plastic; few very fine and fine roots; many very fine, few fine tubular pores; few 1/4 to 1/2 inch krotovinas; calcium carbonate is disseminated and in common fine irregular soft masses; strongly effervescent; 16 percent calcium carbonate equivalent; strongly alkaline; gradual wavy boundary.

C1—37 to 44 inches; light brown (7.5YR 6/4) silt loam; brown (7.5YR 4/4) moist; weak medium and fine subangular blocky structure; hard, friable, slightly sticky and slightly plastic; few very fine roots; common very fine, few fine tubular pores; few fine irregular soft masses of gypsum; calcium carbonate is disseminated and in few fine irregular soft masses; strongly effervescent; 9 percent calcium carbonate equivalent; strongly alkaline; gradual wavy boundary.

C2—44 to 60 inches; brown (7.5YR 5/4) loam; brown (7.5YR 4/4) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few very fine roots; common very fine tubular pores; few fine irregular soft masses of gypsum; calcium carbonates disseminated; strongly effervescent; 7 percent calcium carbonate equivalent; strongly alkaline.

Range in Characteristics

Calcium carbonate equivalent: 5 to 20 percent
Depth to calcic horizon: 12 to 20 inches

A horizon:
Hue: 5YR or 7.5YR
Value: 5 or 6 dry, 4 or 5 moist
Chroma: 3 to 6

Bw horizon:
Hue: 5YR or 7.5YR
Value: 5 or 6 dry, 4 or 5 moist
Chroma: 4 to 6
Texture: fine sandy loam or loam
Reaction: moderately alkaline or strongly alkaline

Bk horizon:
Hue: 5YR or 7.5YR
Value: 5 to 8 dry, 4 or 5 moist
Chroma: 4 or 6
Texture: sandy loam, fine sandy loam, or loam
Reaction: moderately alkaline or strongly alkaline

C horizon:
Hue: 5YR or 7.5YR
Value: 5 to 7 dry, 4 or 5 moist
Chroma: 4 to 7
Texture: sandy loam, fine sandy loam, silt loam, or loam
Reaction: moderately alkaline or strongly alkaline

Milren Series

Map unit(s): 132
Depth class: very deep
Drainage class: well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Landform: hills
Position on landform: footslopes, toeslopes
Parent material: alluvium derived from shale and sandstone
Elevation: 6,200 to 6,900 feet (1,890 to 2,103 meters)
Slope: 0 to 10 percent
Climatic data:
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine, montmorillonitic Borollic Paleargids

Typical Pedon

Map unit in which located: Milren fine sandy loam, 0 to 10 percent slopes
Location in the survey area: about 500 feet east and 1,000 feet south of the northwest corner of sec. 31, T. 9 N., R. 90 W.

A—0 to 2 inches; pale brown (10YR 6/3) fine sandy loam, dark brown (10YR 4/3) moist; weak thin and medium platy structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine to fine vesicular pores; neutral; abrupt smooth boundary.

E—2 to 6 inches; very pale brown (10YR 7/3) fine sandy loam, brown (10YR 5/3) moist; weak fine platy structure parting to weak fine granular; slightly hard, friable, slightly sticky and plastic; common very fine vesicular pores; neutral; abrupt smooth boundary.

BE—6 to 8 inches; yellowish brown (10YR 5/4) sandy clay loam, dark yellowish brown (10YR 4/4) moist; weak thin platy structure parting to weak fine granular; slightly hard, friable, slightly sticky and slightly plastic; neutral; clear smooth boundary.

Bt1—8 to 20 inches; dark yellowish brown (10YR 4/6) clay loam, dark yellowish brown (10YR 4/4) moist; strong coarse and medium prismatic structure parting to strong medium angular blocky; very hard, firm, sticky and plastic; very few faint clay films on faces of peds; mildly alkaline; gradual smooth boundary.

Bk1—20 to 30 inches; yellowish brown (10YR 5/6) clay loam, yellowish brown (10YR 5/4) moist; weak medium subangular blocky structure; hard, firm, sticky and plastic; few fine seams of calcium carbonate; slightly effervescent; moderately alkaline; gradual smooth boundary.

Bk2—30 to 42 inches; light yellowish brown (10YR 6/4) clay loam, yellowish brown (10YR 5/4) moist; weak medium and fine subangular blocky structure; hard, firm, sticky and plastic; common fine and medium seams and masses of calcium carbonate; strongly effervescent; strongly alkaline; gradual smooth boundary.

Bk3—42 to 60 inches; light yellowish brown (10YR 6/4) clay loam, brown (10YR 5/3) moist; massive; hard, firm, sticky and plastic; common fine seams and filaments of calcium carbonate; strongly effervescent; moderately alkaline.

Range in Characteristics

Depth to secondary calcium carbonate: 15 to 25 inches

A horizon:
Reaction: neutral or mildly alkaline

E horizon:
Reaction: neutral or mildly alkaline

Bt horizon:
Hue: 7.5YR or 10YR
Texture: clay or clay loam

Bk horizons:
Reaction: moderately alkaline or strongly alkaline

Miracle Series

Map unit(s): 29, 133
Depth class: moderately deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: concave areas on plateaus, convex and concave areas on plateaus
Parent material: residuum derived from sandstone
Elevation: 7,500 to 8,500 feet (2,286 to 2,591 meters)
Slope: 3 to 12 percent
Climatic data:
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Frost-free period: 50 to 75 days

Taxonomic class: Fine-loamy, mixed Argic Cryoborolls

Typical Pedon

Map unit in which located: Miracle-Coldspring complex, 3 to 12 percent slopes
Location in the survey area: about 50 feet south and 2,600 feet east of the northwest corner of sec. 29, T. 11 N., R. 102 W.

A1—0 to 2 inches; reddish gray (5YR 5/2) sandy loam, dark reddish brown (5YR 3/2) moist; weak fine granular structure; soft, very friable, nonsticky and nonplastic; 5 percent gravel; neutral; clear smooth boundary.

A2—2 to 8 inches; reddish brown (5YR 5/3) sandy loam, dark reddish brown (5YR 3/3) moist; weak fine granular structure; slightly hard, friable, slightly sticky and slightly plastic; 5 percent gravel; neutral; clear smooth boundary.

BAt—8 to 14 inches; reddish brown (2.5YR 5/3) sandy clay loam, dark reddish brown (2.5YR 3/3) moist; weak fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; very few faint clay films on faces of peds; 10 percent gravel; neutral; clear smooth boundary.

Bt—14 to 30 inches; reddish brown (2.5YR 5/4) sandy clay loam, reddish brown (2.5YR 4/4) moist; moderate medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; few distinct clay films on faces of peds; 10 percent gravel; mildly alkaline; clear smooth boundary.

BCt—30 to 37 inches; reddish brown (2.5YR 5/4) sandy clay loam, reddish brown (2.5YR 4/4) moist; weak medium subangular blocky structure; slightly hard, friable, sticky and plastic; very few faint clay films on faces of peds; 5 percent gravel, 5 percent cobbles; mildly alkaline; abrupt smooth boundary.
R—37 inches; hard sandstone bedrock.

Range in Characteristics

Depth to lithic contact: 20 to 40 inches
Thickness of the mollic epipedon: 7 to 15 inches

Bt horizon:
Hue: 2.5YR or 5YR
Texture: Rock fragments: 0 to 15 percent
Reaction: neutral or mildly alkaline

Moosed Series

Map unit(s): 120
Depth class: very shallow to shallow
Drainage class: excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: plateaus
Position on landform: shoulders, backslopes
Parent material: colluvium and residuum derived from sandstone
Elevation: 7,300 to 8,000 feet (2,225 to 2,438 meters)
Slope: 1 to 20 percent
Climatic data:
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Sandy, mixed Lithic Haploborolls

Typical Pedon

Map unit in which located: Layoint-Moosed-Berlake complex, 1 to 20 percent slopes
Location in the survey area: about 1,000 feet north and 200 feet east of the southwest corner of sec. 27, T. 5 N., R. 102 W.

A1—0 to 2 inches; brown (7.5YR 4/2) loamy fine sand, dark brown (7.5YR 3/2) moist; single grained; loose, nonsticky and nonplastic; neutral; abrupt smooth boundary.
A2—2 to 7 inches; reddish brown (5YR 4/3) loamy fine sand, dark reddish brown (5YR 3/3) moist; weak fine granular structure; soft, very friable, nonsticky and nonplastic; neutral; clear wavy boundary.
Bw1—7 to 11 inches; reddish brown (5YR 4/4) loamy fine sand, dark reddish brown (5YR 3/3) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; mildly alkaline; clear wavy boundary.
Bw2—11 to 15 inches; reddish brown (5YR 4/4) loamy fine sand, dark reddish brown (5YR 3/4) moist; weak medium and coarse subangular blocky structure; soft, friable, nonsticky and nonplastic; mildly alkaline; clear wavy boundary.
C—15 to 18 inches; reddish brown (5YR 5/4) channery sand, reddish brown (5YR 4/4) moist; massive; soft, very friable, nonsticky and nonplastic; 15 percent channers, 5 percent flagstones; mildly alkaline; abrupt smooth boundary.
R—18 inches; reddish brown (5YR 5/4) hard sandstone bedrock.

Range in Characteristics

Depth to lithic contact: 7 to 20 inches
Thickness of the mollic epipedon: 7 to 15 inches

A horizon:
Hue: 10YR through 5YR

Bw horizons: (if present)
Hue: 7.5YR or 5YR
Texture: loamy sand or loamy fine sand
Rock fragment content: 0 to 5 percent

C horizons: (if present)
Hue: 7.5YR or 5YR
Texture: loamy sand, loamy fine sand, or sand and their channery or flaggy modifiers
Rock fragment content: 0 to 35 percent

Morapos Series

Map unit(s): 134, 135, 136, 141, 142
Depth class: very deep
Drainage class: well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Landform: convex slopes on hills, mountainsides, plateaus
Parent material: residuum derived form shale, residuum derived from shale, residuum derived from shale and in loess
Elevation: 6,400 to 7,600 feet (1,951 to 2,316 meters)
Slope: 2 to 25 percent

Climatic data:
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Frost-free period: 65 to 85 days

Taxonomic class: Fine, montmorillonitic Typic Argiborolls

Typical Pedon

Map unit in which located: Morapos-Pagoda complex, 2 to 12 percent slopes
Location in the survey area: about 3,850 feet east and 250 feet north of the southwest corner of sec. 32, T. 4 N., R. 91 W.

A—0 to 5 inches; grayish brown (10YR 5/2) clay loam, very dark grayish brown (10YR 3/2) moist; moderate fine granular structure; soft, friable, sticky and plastic; neutral; clear wavy boundary.
Bt1—5 to 9 inches; brown (10YR 5/3) clay loam, dark brown (10YR 3/3) moist; moderate fine and medium angular blocky structure; very hard, firm, very sticky and plastic; common distinct clay films on faces of peds; neutral; clear wavy boundary.
Bt2—9 to 23 inches; yellowish brown (10YR 5/4) clay, dark yellowish brown (10YR 4/4) moist; strong fine prismatic structure parting to strong medium and coarse angular blocky; very hard, firm, very sticky and very plastic; common distinct clay films on faces of peds; neutral; clear wavy boundary.
Bk1—23 to 31 inches; brown (10YR 5/3) clay loam, brown (10YR 4/3) moist; moderate medium prismatic structure parting to moderate coarse subangular blocky; very hard, firm, very sticky and very plastic; calcium carbonate segregated as common white (10YR 8/1) threads; strongly effervescent; moderately alkaline; clear wavy boundary.
Bk2—31 to 40 inches; pale brown (10YR 6/3) clay loam, brown (10YR 5/3) moist; moderate medium prismatic structure parting to weak coarse subangular blocky; hard, firm, sticky and plastic; calcium carbonate segregated as common white (10YR 8/1) threads; strongly effervescent; moderately alkaline; gradual wavy boundary.
Bk3—40 to 53 inches; light gray (2.5Y 7/2) clay loam, light yellowish brown (2.5Y 6/3) moist; weak coarse prismatic structure; slightly hard, firm, sticky and plastic; calcium carbonate segregated as common white (10YR 8/1) threads; 11 percent calcium carbonate equivalent; strongly effervescent; moderately alkaline; diffuse wavy boundary.
Bk4—53 to 60 inches; light gray (2.5Y 7/2) clay loam, light yellowish brown (2.5Y 6/3) moist; massive; slightly hard, firm, sticky and plastic; many white (10YR 8/1) threads of calcium carbonate; 7 percent calcium carbonate equivalent; strongly effervescent; strongly alkaline.

Range in Characteristics

Depth to argillic horizon: 15 to 30 inches
Depth to secondary calcium carbonate: 14 to 30 inches
Thickness of the mollic epipedon: 7 to 15 inches

A horizon:
Reaction: neutral or mildly alkaline

Bt horizon:
Hue: 7.5YR or 10YR
Texture: clay loam, silty clay loam, or clay
Reaction: neutral or mildly alkaline

Bk horizons:
Hue: 10YR or 2.5Y
Texture: clay loam, silty clay loam, or clay
Reaction: moderately alkaline or strongly alkaline

Morset Series

Map unit(s): 137
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: convex and planar slopes on plateaus
Parent material: alluvium derived from sandstone
Elevation: 7,500 to 8,500 feet (2,286 to 2,591 meters)
Slope: 3 to 12 percent
Climatic data:
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Frost-free period: 50 to 75 days

Taxonomic class: Fine-loamy, mixed Argic Cryoborolls

Typical Pedon

Map unit in which located: Morset-Youga complex, 3 to 12 percent slopes
Location in the survey area: about 1,250 feet south and 700 feet east of the northwest corner of sec. 3, T. 11 N., R. 103 W.

A—0 to 7 inches; brown (10YR 4/3) sandy loam, dark brown (10YR 3/3) moist; weak fine and moderate medium granular structure; soft, very friable,

nonsticky and nonplastic; neutral; clear wavy boundary.
Bt1—7 to 13 inches; brown (7.5YR 5/4) sandy clay loam, dark brown (7.5YR 4/4) moist; moderate medium and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; very few faint clay films on faces of peds and bridging sand grains; mildly alkaline; clear wavy boundary.
Bt2—13 to 20 inches; strong brown (7.5YR 5/6) sandy clay loam, dark brown (7.5YR 4/4) moist; weak coarse subangular blocky structure; slightly hard, friable, slightly sticky and nonplastic; very few faint clay films on faces of peds and bridging sand grains; mildly alkaline; clear wavy boundary.
Bk1—20 to 41 inches; pinkish white (7.5YR 8/2) loam, pink (7.5YR 7/4) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; 45 percent calcium carbonate equivalent; calcium carbonate disseminated; violently effervescent; moderately alkaline; clear wavy boundary.
Bk2—41 to 60 inches; pinkish gray (7.5YR 7/3) sandy loam, pale brown (10YR 6/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; 15 percent calcium carbonate equivalent; many fine concentrations of calcium carbonate; violently effervescent; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment contents: 0 to 15 percent
Calcium carbonate equivalent: 15 to 40 percent
Depth to calcic horizon: 15 to 30 inches
Depth to effervescence: 15 to 30 inches
Hue: 7.5YR or 10YR
Thickness of the mollic epipedon: 7 to 10 inches

A horizon:
Reaction: neutral or mildly alkaline

Bt horizon:
Reaction: neutral or mildly alkaline

Bk horizons:
Texture: sandy loam or loam; some pedons have thin strata of fine sandy loam or loamy fine sand

Moyerson Series

Map unit(s): 112, 138, 157
Depth class: shallow
Drainage class: well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Landform: hills
Parent material: residuum derived from shale
Elevation: 6,000 to 7,000 feet (1,829 to 2,134 meters)
Slope: 15 to 65 percent
Climatic data:
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Clayey, montmorillonitic (calcareous), frigid, shallow Ustic Torriorthents

Typical Pedon

Map unit in which located: Kemmerer-Moyerson complex, 20 to 40 percent slopes
Location in the survey area: about 900 feet north and 100 feet east of the southwest corner of sec. 1, T. 5 N., R. 94 W.

A—0 to 1 inch; light gray (2.5Y 7/2) silty clay loam, grayish brown (2.5Y 5/2) moist; moderate fine granular structure; slightly hard, friable, sticky and plastic; strongly effervescent; moderately alkaline; abrupt smooth boundary.
AC—1 inch to 4 inches; light brownish gray (2.5Y 6/2) silty clay, grayish brown (2.5Y 5/2) moist; weak coarse subangular blocky structure parting to moderate fine granular; slightly hard, very friable, sticky and plastic; strongly effervescent; strongly alkaline; clear wavy boundary.
C—4 to 8 inches; light brownish gray (2.5Y 6/2) silty clay, grayish brown (2.5Y 5/2) moist; weak coarse subangular blocky structure parting to weak medium subangular blocky; hard, friable, sticky and plastic; strongly effervescent; moderately alkaline; clear wavy boundary.
Cy—8 to 17 inches; light brownish gray (2.5Y 6/2) silty clay, grayish brown (2.5Y 5/2) moist; massive; slightly hard, friable, sticky and plastic; 30 percent weakly consolidated shale fragments; common clusters of gypsum crystals; strongly effervescent; moderately alkaline; gradual wavy boundary.
Cr—17 inches; weakly consolidated shale bedrock.

Range in Characteristics

Depth to paralithic contact: 10 to 20 inches
Reaction: moderately alkaline or strongly alkaline

A horizon:
Texture: silty clay loam or channery silty clay loam

C horizons:
Texture: silty clay or clay

Rock fragment content: 20 to 50 percent weakly consolidated shale fragments

Muggins Series

Map unit(s): 139
Depth class: very deep
Drainage class: well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Landform: plateaus
Parent material: residuum derived from sandstone and shale
Elevation: 7,500 to 9,200 feet (2,286 to 2,804 meters)
Slope: 3 to 20 percent
Climatic data:
Mean annual precipitation: 18 to 20 inches (457 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Frost-free period: 50 to 75 days

Taxonomic class: Fine, montmorillonitic Typic Cryoboralfs

Typical Pedon

Map unit in which located: Muggins gravelly sandy loam, 3 to 20 percent slopes
Location in the survey area: about 1,800 feet north and 100 feet east of the southwest corner of sec. 31, T. 12 N., R. 103 W.

Oe—0 to 1 inch; moderately decomposed needles and twigs.
E1—1 inch to 7 inches; light reddish brown (5YR 6/3) gravelly sandy loam, reddish brown (5YR 4/3) moist; weak medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; 20 percent gravel; slightly acid; clear smooth boundary.
E2—7 to 19 inches; light reddish brown (5YR 6/4) gravelly sandy loam, reddish brown (5YR 5/4) moist; weak fine subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; 20 percent gravel; moderately acid; abrupt smooth boundary.
Bt1—19 to 23 inches; reddish brown (2.5YR 5/4) clay loam, reddish brown (2.5YR 4/4) moist; moderate fine subangular block structure parting to moderate medium subangular blocky; hard, firm, sticky and plastic; many distinct clay films on faces of peds; 5 percent gravel; moderately acid; clear smooth boundary.
Bt2—23 to 51 inches; red (2.5YR 5/6) clay, red (2.5YR 4/6) moist; moderate coarse subangular blocky structure parting to moderate medium subangular blocky; hard, firm, very sticky and very plastic; common distinct clay films on faces of peds; slightly acid; clear smooth boundary.
BC—51 to 60 inches; light red (2.5YR 6/6) clay loam, red (2.5YR 5/6) moist; moderate coarse subangular blocky structure; hard, firm, sticky and plastic; slightly acid.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 0 to 15 percent; some thin individual horizons contain 15 to 35 percent
Depth to argillic horizon: 40 inches or more

E horizon:
Hue: 5YR or 7.5YR

Bt horizon:
Hue: 2.5YR or 5YR
Texture: clay, clay loam, or sandy clay
Reaction: moderately acid or slightly acid

C horizon: (when present)
Hue: 2.5YR or 5YR
Texture: sandy clay loam or clay loam

Mulgon Series

Map unit(s): 104
Local phase(s): dry
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: mountainsides
Parent material: colluvium derived from sandstone
Elevation: 7,000 to 8,000 feet (2,134 to 2,438 meters)
Slope: 25 to 50 percent
Climatic data:
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Frost-free period: 65 to 85 days

Taxonomic class: Loamy-skeletal, mixed Mollic Cryoboralfs

Typical Pedon

Map unit in which located: Ironco-Mulgon, dry, complex, 25 to 50 percent slopes, extremely bouldery
Location in the survey area: about 1,550 feet east and 600 feet south of the northwest corner of sec. 1, T. 9 N., R. 104 W.

Oi—0 to 1 inch; slightly decomposed needles and twigs.
A—1 inch to 7 inches; reddish gray (5YR 5/2) very stony sandy loam; dark reddish brown (5YR 3/2) moist; weak medium granular structure parting to weak fine granular; soft, very friable, slightly sticky and slightly plastic; 15 percent gravel, 20 percent cobbles, 15 percent stones, 10 percent boulders; slightly acid; abrupt smooth boundary.
E—7 to 16 inches; pink (5YR 7/3) very stony sandy loam, reddish brown (5YR 4/3) moist; weak medium subangular blocky structure parting to weak fine subangular blocky; slightly hard, very friable, slightly sticky and slightly plastic; 10 percent gravel, 20 percent cobbles, 10 percent stones, 10 percent boulders; slightly acid; gradual smooth boundary.
E/B—16 to 23 inches; 70 percent pink (5YR 7/3) and 30 percent light reddish brown (2.5YR 6/4) very stony sandy clay loam; light reddish brown (5YR 6/3) and reddish brown (2.5YR 5/4) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; hard, friable, slightly sticky and slightly plastic; 20 percent gravel, 20 percent cobbles, 10 percent stones, 5 percent boulders; slightly acid; clear smooth boundary.
Bt1—23 to 32 inches; light reddish brown (2.5YR 6/4) very stony sandy clay loam, reddish brown (2.5YR 4/4) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; hard, friable, sticky and slightly plastic; few faint clay films on faces of peds and bridging sand grains; 20 percent gravel, 20 percent cobbles, 10 percent stones, 5 percent boulders; moderately acid; gradual smooth boundary.
Bt2—32 to 60 inches; red (2.5YR 5/6) very stony sandy clay loam, red (2.5YR 4/6) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; hard, friable, sticky and slightly plastic; few faint clay films on faces of peds and bridging sand grains; 20 percent gravel, 20 percent cobbles, 10 percent stones, 5 percent boulders; moderately acid.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 40 to 60 percent

Bt horizons:
Hue: 5YR or 2.5YR
Texture: very stony clay loam or very stony sandy clay loam
Reaction: slightly acid or moderately acid

Namlot Series

Map unit(s): 252, 261
Depth class: shallow
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: mountain slopes
Parent material: slope alluvium over residuum derived from sandstone
Elevation: 7,600 to 8,600 feet (2,316 to 2,621 meters)
Slope: 15 to 40 percent
Climatic data:
Mean annual precipitation: 16 to 22 inches (406 to 559 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Frost-free period: 70 to 90 days

Taxonomic class: Loamy-skeletal, siliceous, superactive, frigid Lithic Argiustolls

Typical Pedon

Map unit in which located: Dokie-Namlot association, 15 to 70 percent slopes, from the Uintah Area, Utah Soil Survey
Location in the Uintah Area, Utah survey area: about 2 1/2 miles southwest of Calder Reservoir; about 200 feet west and 2,500 feet north of the southeast corner of sec. 19, T. 1 S., R. 24 E.; Blair Basin, Utah USGS quadrangle; latitude 40 degrees, 43 minutes, 17 seconds north and longitude 109 degrees, 15 minutes, 36 seconds west; NAD 27.

The soil surface is covered by undecomposed forest letter of needles, twigs, and cones about 1/2 inch to 2 inches thick, and by 5 percent stones, 15 percent gravel, and 25 percent cobbles.

A1—0 to 1 inch; brown (7.5YR 5/3) extremely cobbly sandy loam, dark brown (7.5YR 3/2) moist; weak thin platy structure; soft, very friable, slightly sticky and slightly plastic; many very fine, common fine roots; common very fine and fine, few medium tubular pores; 5 percent stones, 15 percent gravel, and 25 percent cobbles; slightly alkaline (pH 7.4); abrupt smooth boundary.
A2—1 inch to 3 inches; brown (7.5YR 4/3) extremely cobbly sandy loam, dark brown (7.5YR 3/2)

moist; weak medium subangular blocky structure parting to medium very fine granular; slightly hard, very friable, slightly sticky and slightly plastic; many very fine, common fine roots; many very fine, common fine, few medium tubular pores; 5 percent stones, 25 percent gravel, and 40 percent cobbles; neutral (pH 7.2); clear smooth boundary. (The combined thickness of the A horizons is 2 to 9 inches.)

Bt1—3 to 7 inches; brown (7.5YR 5/4) very cobbly sandy clay loam, dark brown (7.5YR 3/3) moist; moderate coarse subangular blocky structure parting to moderate very fine and fine subangular blocky; hard, friable, moderately sticky and slightly plastic; common very fine and fine roots; many very fine and fine, common medium tubular pores; 5 percent stones, 20 percent gravel, and 25 percent cobbles; common distinct clay films on faces of peds and lining pores; neutral (pH 7.3); clear wavy boundary.

Bt2—7 to 17 inches; reddish brown (5YR 5/3) extremely cobbly sandy clay loam, dark reddish brown (5YR 3/3) moist; moderate fine and medium subangular blocky structure; hard, friable, moderately sticky and slightly plastic; few very fine, fine, medium, and coarse roots; many very fine and fine, common medium tubular pores; 5 percent stones, 25 percent gravel, and 30 percent cobbles; few distinct clay films on faces of peds and lining pores; neutral (pH 7.2); abrupt wavy boundary. (The combined thickness of the Bt horizons is 8 to 11 inches.)

R—17 inches; unweathered sandstone bedrock.

Range in Characteristics

Particle-size control section (weighted average):
- *Clay content:* 18 to 27 percent
- *Rock fragment content:* 40 to 80 percent subangular fragments

Depth to lithic contact: 10 to 20 inches to sandstone bedrock

Mean annual soil temperature: 42 to 45 degrees F.

Moisture control section: is affected by precipitation that is distributed evenly throughout the year with a slight increase in late summer and early fall

Moisture regime: typic ustic

Thickness of the mollic epipedon: 7 to 17 inches

A horizon:
- *Hue:* 5YR or 7.5YR
- *Value:* 3 to 5 dry, 2 or 3 moist
- *Chroma:* 1 to 3 moist
- *Texture:* extremely cobbly sandy loam
- *Rock fragment content:* 60 to 75 percent sandstone fragments; predominantly cobbles, with gravel and stones
- *Reaction:* neutral or slightly alkaline

Bt horizon:
- *Hue:* 5YR or 7.5YR
- *Value:* 3 to 5 dry, 3 or 4 moist
- *Chroma:* 2 to 4 dry or moist
- *Texture:*, very cobbly sandy clay loam, extremely cobbly sandy clay loam, very cobbly sandy loam, or extremely cobbly sandy loam
- *Rock fragment content:* 40 to 80 percent sandstone fragments, predominantly cobbles, with gravel and stones
- *Reaction:* neutral or slightly alkaline

Ninot Series

Map unit(s): 140
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: hills
Position on landform: footslopes
Parent material: colluvium derived from sandstone and basal conglomerate
Elevation: 6,800 to 8,100 feet (2,073 to 2,469 meters)
Slope: 15 to 45 percent
Climatic data:
- *Mean annual precipitation:* 13 to 14 inches (330 to 356 millimeters)
- *Mean annual air temperature:* 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
- *Frost-free period:* 75 to 95 days

Taxonomic class: Fine-loamy, carbonatic Aridic Calciborolls

Typical Pedon

Map unit in which located: Ninot-Crago-Garlips complex, 15 to 45 percent slopes

Location in the survey area: about 2,500 feet west and 500 feet south of the northeast corner of sec. 27, T. 5 N., R. 98 W.

A1—0 to 3 inches; brown (10YR 5/3) very gravelly loam, very dark grayish brown (10YR 3/2) moist; moderate medium granular structure parting to weak fine granular; soft, very friable, slightly sticky and nonplastic; 40 percent gravel, 5 percent cobbles; strongly effervescent; moderately alkaline; abrupt wavy boundary.

A2—3 to 7 inches; grayish brown (10YR 5/2) gravelly loam, dark brown (10YR 3/3) moist; moderate coarse granular structure parting to weak fine

granular; soft, very friable, slightly sticky and slightly plastic; 25 percent gravel, 5 percent cobbles; strongly effervescent; moderately alkaline; clear wavy boundary.

Bw—7 to 10 inches; pale brown (10YR 6/3) gravelly loam, brown (10YR 4/3) moist; moderate fine subangular blocky structure; soft, friable, slightly sticky and slight plastic; 25 percent gravel, 5 percent cobbles; 25 percent calcium carbonate equivalent; violently effervescent; moderately alkaline; clear wavy boundary.

Bk1—10 to 13 inches; light gray (10YR 7/2) gravelly loam, yellowish brown (10YR 5/4) moist; weak medium subangular blocky structure; slightly hard, firm, slightly sticky and slightly plastic; 25 percent gravel, 5 percent cobbles; 45 percent calcium carbonate equivalent; calcium carbonate disseminated and as coatings on rock fragments; violently effervescent; moderately alkaline; clear wavy boundary.

Bk2—13 to 26 inches; white (10YR 8/2) gravelly loam, light yellowish brown (10YR 6/4) moist; weak medium subangular blocky structure; slightly hard, firm, slightly sticky and slightly plastic; 25 percent gravel, 5 percent cobbles; 55 percent calcium carbonate equivalent; calcium carbonate disseminated and as coatings on rock fragments; violently effervescent; strongly alkaline; gradual wavy boundary.

Bk3—26 to 32 inches; white (10YR 8/2) gravelly loam, light gray (10YR 7/2) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; 25 percent gravel; 5 percent cobbles; 45 percent calcium carbonate equivalent; calcium carbonate disseminated and as coatings on rock fragments; violently effervescent; strongly alkaline; gradual wavy boundary.

Bk4—32 to 60 inches; light gray (10YR 7/2) gravelly loam, very pale brown (10YR 7/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; 25 percent gravel, 5 percent cobbles; 40 percent calcium carbonate equivalent; calcium carbonate disseminated and as coatings on rock fragments; violently effervescent; strongly alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 15 to 35 percent
Calcium carbonate equivalent: 40 to 50 percent
Depth to secondary calcium carbonate: 10 to 20 inches
Hue: 10YR or 2.5Y
Thickness of the mollic epipedon: 7 to 10 inches

Bw and Bk horizons:
Texture: gravelly loam or gravelly clay loam
Clay content: 20 to 30 percent

Nortez Series

Map unit(s): 141, 142
Local phase(s): cool
Depth class: moderately deep
Drainage class: well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Landform: mountainsides, plateaus
Parent material: residuum derived from interbedded sandstone and shale
Elevation: 6,400 to 7,600 feet (1,951 to 2,316 meters)
Slope: 3 to 25 percent
Climatic data:
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Frost-free period: 65 to 85 days

Taxonomic class: Fine, montmorillonitic Typic Argiborolls

Typical Pedon

Map unit in which located: Nortez, cool-Morapos complex, 12 to 25 percent slopes
Location in the survey area: about 2,200 feet north and 800 feet east of the southwest corner of sec. 24, T. 5 N., R. 92 W.

A1—0 to 5 inches; dark grayish brown (10YR 4/2) loam, very dark brown (10YR 2/2) moist; weak medium subangular blocky structure parting to weak fine granular; soft, very friable, slightly sticky and slightly plastic; many fine and medium roots; neutral; clear smooth boundary.

A2—5 to 10 inches; dark grayish brown (10YR 4/2) clay loam, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure parting to moderate fine subangular blocky; slightly hard, friable, sticky and plastic; many fine and medium roots; neutral; clear smooth boundary.

Bt—10 to 26 inches; dark yellowish brown (10YR 5/4) clay loam, dark yellowish brown (10YR 4/4) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; hard, firm, sticky and plastic; common distinct clay films on faces of peds; many fine and medium roots; 10 percent channers; neutral; clear wavy boundary.

BCt—26 to 30 inches; yellowish brown (10YR 5/4) channery clay loam, dark yellowish brown (10YR 4/4) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; hard, firm, sticky and plastic; very few faint clay films on faces of peds and in pores; few fine and medium roots; 35 percent channers; neutral; abrupt wavy boundary.
R—30 inches; hard sandstone bedrock.

Range in Characteristics

Depth to argillic horizon: 20 to 40 inches
Depth to lithic contact: 20 to 40 inches
Thickness of the mollic epipedon: 10 to 14 inches

Bt horizon:
Hue: 7.5YR or 10YR
Texture: clay loam or clay

BCt horizon:
Texture: channery clay loam, clay loam, or clay
Reaction: neutral or mildly alkaline

Nunemaker Series

Map unit(s): 143
Depth class: very deep
Drainage class: well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Landform: hills
Position on landform: footslopes, toeslopes
Parent material: alluvium derived from shale
Elevation: 6,300 to 6,800 feet (1,920 to 2,073 meters)
Slope: 3 to 12 percent
Climatic data:
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine, montmorillonitic Borollic Camborthids

Typical Pedon

Map unit in which located: Nunemaker clay loam, 3 to 12 percent slopes
Location in the survey area: about 500 feet south and 2,000 feet west of the northeast corner of sec. 21, T. 7 N., R. 90 W.

A—0 to 1 inch; brown (10YR 5/3) clay loam, dark brown (10YR 4/3) moist; moderate medium platy structure parting to moderate very fine granular; slightly hard, firm, sticky and plastic; 5 percent gravel; neutral; abrupt smooth boundary.
Bw1—1 inch to 15 inches; brown (10YR 5/3) clay, dark brown (10YR 4/3) moist; moderate medium prismatic structure parting to strong coarse subangular blocky; very hard, firm, very sticky and very plastic; many stress surfaces on peds; mildly alkaline; clear smooth boundary.
Bw2—15 to 20 inches; brown (10YR 5/3) clay, dark brown (10YR 4/3) moist; strong coarse subangular blocky structure; very hard, firm, very sticky and very plastic; many stress surfaces on peds; moderately alkaline; clear smooth boundary.
Bw3—20 to 26 inches; brown (10YR 5/3) clay, dark brown (10YR 4/3) moist; moderate medium subangular blocky structure; very hard, firm, very sticky and very plastic; common stress surfaces on peds; slightly effervescent; moderately alkaline; clear smooth boundary.
Bk1—26 to 33 inches; yellowish brown (10YR 5/4) clay, dark yellowish brown (10YR 4/4) moist; moderate medium subangular blocky structure; very hard, firm, very sticky and very plastic; few stress surfaces on peds; few fine irregular soft masses of calcium carbonate; slightly effervescent; moderately alkaline; clear smooth boundary.
Bk2—33 to 40 inches; light yellowish brown (10YR 6/4) clay, yellowish brown (10YR 5/4) moist; weak medium subangular blocky structure; hard, friable, sticky and plastic; few fine irregular soft masses of calcium carbonate; slightly effervescent; moderately alkaline; gradual smooth boundary.
C—40 to 45 inches; light yellowish brown (10YR 6/4) clay loam, yellowish brown (10YR 5/4) moist; massive; hard, friable, sticky and slightly plastic; 5 percent gravel; moderately alkaline; clear smooth boundary.
2C—45 to 60 inches; light yellowish brown (10YR 6/4) gravelly sandy clay loam, yellowish brown (10YR 5/4) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; 20 percent gravel; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 45 to 55 percent
Depth to secondary calcium carbonate: 10 to 20 inches
Depth to secondary calcium sulfate: 20 to 30 inches in some pedons
Note: Cracks up to 1/2 inch wide and slickensides may occur in the upper 20 inches of the profile. In most pedons, some layer between a depth of 15

to 35 inches has 10 to 15 percent exchangeable sodium.

A horizon:
Rock fragment content: 0 to 10 percent gravel

Bw horizons:
Hue: 10YR or 2.5Y
Texture: clay or silty clay
Rock fragment content: 0 to 5 percent gravel
Reaction: mildly alkaline to moderately alkaline

Bk and C horizons:
Hue: 10YR or 2.5Y
Texture: clay, silty clay, clay loam, or silty clay loam
Rock fragment content: 0 to 5 percent gravel

2C horizon: (if present)
Texture: gravelly sandy clay loam, gravelly clay loam, gravelly loam, or sandy clay loam
Clay content: 20 to 35 percent

Obadia Series

Map unit(s): 81
Local phase(s): none specified
Depth class: very deep
Drainage class: well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Landform: hills
Position on landform: toeslopes
Parent material: alluvium derived from sandstone and shale
Elevation: 6,400 to 6,800 feet (1,951 to 2,073 meters)
Slope: 1 to 8 percent
Climatic data:
Mean annual precipitation: 11 to 15 inches (279 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine, montmorillonitic Borollic Natrargids

Typical Pedon

Map unit in which located: Forelle-Obadia complex, 1 to 8 percent slopes
Location in the survey area: about 1,800 feet east and 2,000 feet south of northwest corner of sec. 5, T. 7 N., R. 90 W.

E—0 to 1 inch; light gray (10YR 7/2) sandy loam, dark grayish brown (10YR 4/2) moist; weak medium platy structure; soft, very friable, slightly sticky and slightly plastic; mildly alkaline; abrupt smooth boundary.
Bt—1 inch to 8 inches; brown (10YR 5/3) clay, dark brown (10YR 4/3) moist; moderate medium prismatic structure parting to moderate medium angular blocky; very hard, firm, very sticky and very plastic; common prominent clay films on faces of peds; 12 percent exchangeable sodium; mildly alkaline; clear wavy boundary.
Btn—8 to 13 inches; brown (10YR 5/3) clay, dark brown (10YR 4/3) moist; moderate coarse prismatic structure parting to moderate medium prismatic; very hard, firm, very sticky and very plastic; common prominent clay films on faces of peds; 16 percent exchangeable sodium; slightly effervescent; strongly alkaline; clear wavy boundary.
Btkn—13 to 21 inches; light yellowish brown (2.5Y 6/4) clay loam, light olive brown (2.5Y 5/4) moist; moderate medium prismatic structure parting to moderate medium subangular blocky; very hard, firm, very sticky and very plastic; few faint clay films on faces of peds; few distinct threads of calcium carbonate; 16 percent exchangeable sodium; slightly effervescent; strongly alkaline; clear wavy boundary.
Bkn—21 to 42 inches; light brownish gray (2.5Y 6/2) clay loam, olive gray (5Y 5/2) moist; massive; hard, firm, sticky and plastic; common fine threads of calcium carbonate; 17 percent exchangeable sodium; strongly effervescent; strongly alkaline; clear wavy boundary.
Bky—42 to 60 inches; light brownish gray (2.5Y 6/2) sandy clay loam, olive (5Y 5/3) moist; massive; hard, firm, sticky and plastic; 10 percent gravel; common fine gypsum crystals; strongly effervescent; moderately alkaline.

Range in Characteristics

Depth to secondary calcium carbonate: 10 to 20 inches

Bt horizon:
Hue: 7.5YR or 10YR
Texture: clay loam or clay
Reaction: mildly alkaline or moderately alkaline

Btn horizon:
Hue: 7.5YR or 10YR
Texture: clay loam or clay
Reaction: moderately alkaline or strongly alkaline

Btkn horizon:
Hue: 10YR or 2.5Y
Texture: clay loam or clay

Bk horizons:
Hue: 10YR through 5Y
Texture: clay loam or sandy clay loam
Reaction: moderately alkaline or strongly alkaline

Pagoda Series

Map unit(s): 136, 144, 145
Local phase(s): none specified
Depth class: very deep
Drainage class: well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Landform: alluvial fans, concave slopes on hills, hillslopes
Parent material: alluvium and residuum derived from shale, residuum derived from shale
Elevation: 6,400 to 7,200 feet (1,951 to 2,195 meters)
Slope: 1 to 25 percent
Climatic data:
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Frost-free period: 65 to 85 days

Taxonomic class: Fine, montmorillonitic Pachic Argiborolls

Typical Pedon

Map unit in which located: Pagoda clay loam, 1 to 12 percent slopes
Location in the survey area: about 300 feet north and 2,400 feet east of the southwest corner of sec. 32, T. 5 N., R. 91 W.

Ap—0 to 9 inches; grayish brown (10YR 5/2) clay loam, very dark grayish brown (10YR 3/2) moist; weak coarse platy and weak medium to very coarse subangular blocky structure; hard, friable, sticky and plastic; mildly alkaline; clear smooth boundary.
BAt—9 to 17 inches; grayish brown (10YR 5/2) clay loam, very dark grayish brown (10YR 3/2) moist; moderate medium prismatic structure parting to strong fine and medium angular blocky; very hard, firm, sticky and plastic; few faint clay films on faces of peds; mildly alkaline; clear wavy boundary.
Bt—17 to 25 inches; grayish brown (10YR 5/2) clay, very dark grayish brown (10YR 3/2) moist; moderate medium prismatic structure parting to moderate medium angular blocky; very hard, firm, very sticky and very plastic; common faint clay films on faces of peds and along interstitial pores; mildly alkaline; gradual wavy boundary.
Btk—25 to 37 inches; grayish brown (2.5Y 5/2) clay, dark grayish brown (2.5Y 4/2) moist; moderate medium prismatic structure parting to weak medium angular blocky; very hard, firm, very sticky and very plastic; few faint clay films on faces of peds and along interstitial pores; few fine concentrations of calcium carbonate; slightly effervescent; moderately alkaline; clear wavy boundary.
Bk—37 to 60 inches; light brownish gray (2.5Y 6/2) clay, grayish brown (2.5Y 5/2) moist; weak fine and medium platy structure parting to weak fine angular blocky; very hard, very firm, very sticky and very plastic; common fine concentrations of calcium carbonate; strongly effervescent; moderately alkaline.

Range in Characteristics

Depth to argillic horizon: 30 to 40 inches
Depth to secondary calcium carbonate: 25 to 40 inches
Thickness of the mollic epipedon: 16 to 30 inches
Note: This soil is outside the range of the Pagoda series because this soil is moist is some or all parts of the moisture control section during the period of May 15 to June 15.

A horizon:
Texture: loam or clay loam
Reaction: neutral or mildly alkaline

Bt horizon:
Texture: clay loam, silty clay, or clay
Reaction: neutral or mildly alkaline

Bk horizon:
Hue: 10YR or 2.5Y
Texture: clay loam, silty clay, or clay

Pavillion Series

Map unit(s): 146
Local phase(s): none specified
Depth class: moderately deep
Drainage class: well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: hills
Position on landform: backslopes, footslopes
Parent material: colluvium and residuum derived from shale

Elevation: 5,700 to 6,200 feet (1,737 to 1,890 meters)
Slope: 3 to 20 percent
Climatic data:
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Frost-free period: 90 to 105 days

Taxonomic class: Fine-loamy, mixed, mesic Typic Camborthids

Typical Pedon

Map unit in which located: Pavillion-Degater complex, 3 to 20 percent slopes
Location in the survey area: about 2,100 feet west and 50 feet south of the northeast corner of sec. 11, T. 4 N., R. 99 W.

A—0 to 3 inches; light gray (10YR 7/2) loam, brown (10YR 5/3) moist; moderate medium platy structure parting to moderate thin platy; soft, friable, slightly sticky and slightly plastic; mildly alkaline; abrupt smooth boundary.
BA—3 to 6 inches; very pale brown (10YR 7/3) clay loam, brown (10YR 5/3) moist; weak coarse subangular blocky structure parting to weak very fine subangular blocky; soft, friable, sticky and plastic; mildly alkaline; abrupt smooth boundary.
Bw1—6 to 9 inches; very pale brown (10YR 7/4) clay loam, brown (10YR 5/3) moist; weak medium prismatic structure parting to moderate fine subangular blocky; slightly hard, friable, sticky and plastic; slightly effervescent; mildly alkaline; clear wavy boundary.
Bw2—9 to 14 inches; pale yellow (2.5Y 7/4) clay loam, light yellowish brown (2.5Y 6/4) moist; moderately fine subangular blocky structure; hard, firm, sticky and plastic; strongly effervescent; moderately alkaline; clear wavy boundary.
Bk1—14 to 26 inches; light gray (2.5Y 7/2) clay loam, olive (5Y 5/3) moist; weak medium prismatic structure; hard, firm, sticky and plastic; common fine concentrations of calcium carbonate; violently effervescent; moderately alkaline; clear smooth boundary.
Bk2—26 to 36 inches; light gray (2.5Y 7/2) clay loam, olive (5Y 5/3) moist; massive; hard, firm, sticky and plastic; 25 percent fine weakly consolidated shale fragments; common fine concentrations of calcium carbonate; violently effervescent; moderately alkaline; gradual wavy boundary.
Cr—36 inches; pale olive soft gypsiferous shale bedrock.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 0 to 10 percent
Depth to paralithic contact: 20 to 40 inches
Depth to secondary calcium carbonate: 10 to 26 inches
Note: This soil is outside the range of the Pavillion series because this soil has 15 to 35 percent fine or coarser sand in the particle-size control section.

A horizon:
Hue: 10YR or 2.5Y

Bw horizons:
Hue: 10YR or 2.5Y
Texture: loam or clay loam
Reaction: mildly alkaline or moderately alkaline

Bk horizons:
Hue: 10YR to 5Y
Texture: loam or silty clay loam
Reaction: moderately alkaline or strongly alkaline

Peeler Series

Map unit(s): 147
Local phase(s): none specified
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: alluvial fans, mountainsides
Parent material: alluvium and residuum derived from sandstone and basalt
Elevation: 8,000 to 9,000 feet (2,438 to 2,743 meters)
Slope: 5 to 25 percent
Climatic data:
Mean annual precipitation: 20 to 22 inches (508 to 559 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Frost-free period: 50 to 75 days

Taxonomic class: Fine-loamy, mixed Typic Cryoboralfs

Typical Pedon

Map unit in which located: Peeler stony fine sandy loam, 5 to 25 percent slopes, very stony

Location in the survey area: about 2,000 feet west and 700 feet south of the northeast corner of sec. 12, T. 10 N., R. 90 W.

Oi—0 to 1 inch; slightly decomposed organic material consisting of needles, bark, and burnt wood fragments.

A—1 inch to 4 inches; light brownish gray (10YR 6/2) stony fine sandy loam, dark brown (10YR 3/3) moist; moderate medium granular structure; soft, very friable, slightly sticky and nonplastic; 5 percent gravel, 5 percent cobbles, 5 percent stones and boulders; neutral; clear wavy boundary.

E1—4 to 8 inches; light gray (10YR 7/2) stony fine sandy loam, brown (10YR 4/3) moist; moderate medium granular structure; soft, very friable, slightly sticky and nonplastic; 10 percent gravel, 5 percent cobbles, 3 percent stones and boulders; neutral; gradual wavy boundary.

E2—8 to 18 inches; very pale brown (10YR 7/3) stony fine sandy loam, brown (10YR 5/3) moist; weak medium subangular blocky structure; slightly hard, friable, slightly sticky and nonplastic; 10 percent gravel, 5 percent cobbles, 3 percent stones and boulders; slightly acid; clear wavy boundary.

B/E—18 to 25 inches; light yellowish brown (10YR 6/4) cobbly sandy clay loam, yellowish brown (10YR 5/4) moist; moderate medium prismatic structure parting to moderate medium subangular blocky; hard, friable, sticky and slightly plastic; moderately thick light gray (10YR 7/2) coatings of uncoated sand grains on faces of peds; 10 percent gravel, 10 percent cobbles; slightly acid; clear irregular boundary.

Bt—25 to 45 inches; strong brown (7.5YR 5/6) and pale brown (10YR 6/3) sandy clay loam, dark brown (7.5YR 3/4) and yellowish brown (10YR 5/4) moist; moderate medium prismatic structure parting to moderate medium angular blocky; few faint clay films on faces of peds; very hard, firm, sticky and plastic; 10 percent gravel; moderately acid; clear wavy boundary.

BC—45 to 60 inches; light yellowish brown (10YR 6/4) and light gray (10YR 7/2) gravelly sandy clay loam, dark brown (10YR 4/3) and light yellowish brown (10YR 6/4) moist; weak medium prismatic structure parting to moderate coarse platy; slightly hard, friable, sticky and slightly plastic; 15 percent gravel, 5 percent cobbles; moderately acid.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 10 to 25 percent

E horizon:
Hue: 2.5Y or 10YR

Bt horizon:
Hue: 2.5Y or 10YR
Texture: sandy clay loam, gravelly sandy clay loam, or cobbly sandy clay loam
Reaction: moderately acid or slightly acid

BC horizon:
Hue: 2.5Y or 10YR
Texture: gravelly sandy clay loam, sandy loam, or gravelly sandy loam
Reaction: moderately acid or slightly acid

Pensore Series

Map unit(s): 48, 230, 241
Local phase(s): none specified
Depth class: shallow
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: hills, mesas, valleys
Position on landform: summits, shoulders, backslopes, footslopes
Parent material: residuum derived from limestone, residuum weathered from limestone
Elevation: 6,300 to 8,500 feet (1,920 to 2,591 meters)
Slope: 3 to 75 percent
Climatic data:
Mean annual precipitation: 12 to 14 inches (305 to 356 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Loamy-skeletal, carbonatic Borollic Lithic Calciorthids

Typical Pedon

Map unit in which located: Crago-Pensore-Grapit association, 6 to 75 percent slopes
Location in the survey area: about 2,100 feet north and 400 feet east of the southwest corner of sec. 21, T. 7 N., R. 102 W.

A—0 to 2 inches; grayish brown (10YR 5/2) gravelly loam, very dark grayish brown (10YR 3/2) moist; weak medium platy structure parting to weak fine

granular; soft, very friable, slightly sticky and nonplastic; 15 percent gravel; 1 to 3 mm pendants of calcium carbonate on rock fragments; slightly effervescent; moderately alkaline; abrupt smooth boundary.

BA—2 to 7 inches; brown (7.5YR 5/2) gravelly loam, dark brown (7.5YR 4/2) moist; moderate fine subangular blocky structure; soft, friable, slightly sticky and slightly plastic; 15 percent gravel; 1 to 3 mm pendants of calcium carbonate on rock fragments; 13 percent calcium carbonate equivalent; strongly effervescent; moderately alkaline; abrupt wavy boundary.

Bk1—7 to 12 inches; pinkish gray (7.5YR 7/2) very gravelly loam, pinkish gray (7.5YR 6/2) moist; moderate fine subangular blocky structure; slightly hard, firm, slightly sticky and slightly plastic; 40 percent gravel; 2 to 7 mm thick pendants of calcium carbonate on rock fragments; 45 percent calcium carbonate equivalent; violently effervescent; moderately alkaline; clear wavy boundary.

Bk2—12 to 17 inches; pinkish white (7.5YR 8/2) very gravelly loam, pink (7.5YR 7/4) moist; massive; slightly hard, firm, slightly sticky and slightly plastic; 45 percent gravel, 15 percent cobbles; 3 to 10 mm thick pendants and coatings of calcium carbonate on rock fragments; 55 percent calcium carbonate equivalent; violently effervescent moderately alkaline; abrupt smooth boundary.

R—17 inches; limestone bedrock.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 18 to 25 percent
Rock fragment content: 35 to 60 percent
Calcium carbonate equivalent: 40 to 55 percent
Depth to lithic contact: 10 to 20 inches
Hue: 10YR or 7.5YR

Bk horizon:
Texture: very gravelly loam, or very channery loam

Persayo Series

Map unit(s): 7
Local phase(s): moist
Depth class: shallow
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: hillslopes
Parent material: residuum derived from sandstone and shale
Elevation: 5,700 to 6,000 feet (1,737 to 1,829 meters)
Slope: 10 to 30 percent
Climatic data:
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Frost-free period: 90 to 105 days

Taxonomic class: Loamy, mixed (calcareous), mesic, shallow Typic Torriorthents

Typical Pedon

Map unit in which located: Avalon-Persayo, moist-Degater complex, 3 to 30 percent slopes
Location in the survey area: about 2,500 feet south and 1,900 feet east of the northwest corner of sec. 16, T. 3 N., R. 102 W.

A—0 to 2 inches; light gray (5Y 7/2) channery loam, light olive gray (5Y 6/2) moist; moderate fine platy structure parting to weak fine granular; slightly hard, friable, sticky and plastic; 15 percent channers; slightly effervescent; mildly alkaline; clear smooth boundary.

AC—2 to 5 inches; pale olive (5Y 6/3) loam, olive (5Y 6/3) moist; weak fine platy and weak medium subangular blocky structure; slightly hard, friable, sticky and plastic; strongly effervescent; mildly alkaline; clear smooth boundary.

C—5 to 10 inches; 60 percent pale olive (10YR 6/3) and 30 percent olive gray (10YR 5/2) loam, olive (5Y 5/3), and olive gray (5Y 4/2) moist; moderate fine platy rock structure; slightly hard, friable, sticky and plastic; 50 percent weakly consolidated shale fragments; violently effervescent; moderately alkaline; gradual smooth boundary.

Cr—10 inches; weakly consolidated shale bedrock.

Range in Characteristics

Depth to paralithic contact: 10 to 20 inches

A horizon:
Hue: 2.5Y or 5Y
Rock fragment content: 15 to 25 percent
Reaction: mildly alkaline or moderately alkaline

C horizon:
Hue: 10YR through 5Y
Texture: loam or clay loam
Rock fragment content: 0 to 10 percent

Piezon Series

Map unit(s): 95, 218

Depth class: moderately deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: hillslopes, plateaus
Parent material: residuum derived from siltstone, residuum derived from siltstone and fine grained sandstone
Elevation: 6,100 to 7,700 feet (1,859 to 2,347 meters)
Slope: 3 to 15 percent
Climatic data:
Mean annual precipitation: 9 to 13 inches (229 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine-loamy, mixed Borollic Calciorthids

Typical Pedon

Map unit in which located: Yellowwash-Piezon complex, 5 to 15 percent slopes
Location in the survey area: about 1,700 feet east and 1,900 feet north of the southwest corner of sec. 1, T. 10 N., R. 99 W.

A—0 to 4 inches; brown (10YR 5/3) loam, dark brown (10YR 4/3) moist; weak fine granular structure; soft, very friable, sticky and plastic; 7 percent calcium carbonate equivalent; strongly effervescent; moderately alkaline; abrupt smooth boundary.
Bw—4 to 13 inches; pale brown (10YR 6/3) loam, yellowish brown (10YR 5/4) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; slightly hard, friable, sticky and plastic; 15 percent calcium carbonate equivalent; strongly effervescent; moderately alkaline; clear smooth boundary.
Bk1—13 to 24 inches; very pale brown (10YR 7/3) loam, light yellowish brown (10YR 6/4) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; slightly hard, friable, sticky and plastic; 5 percent channers; 20 percent calcium carbonate equivalent; calcium carbonate disseminated and as common fine threads; violently effervescent; moderately alkaline; clear smooth boundary.
Bk2—24 to 30 inches; very pale brown (10YR 7/3) loam, light yellowish brown (10YR 6/4) moist; weak medium subangular blocky structure parting to weak fine subangular blocky; slightly hard, friable, sticky and plastic; 5 percent channers; 21 percent calcium carbonate equivalent; calcium carbonate disseminated and as common fine threads; violently effervescent; moderately alkaline; abrupt wavy boundary.
Cr—30 inches; weakly consolidated, highly fractured thinly bedded sandstone.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 5 to 20 percent channers
Calcium carbonate equivalent: 15 to 25 percent
Depth to paralithic contact: 20 to 40 inches
Hue: 10YR or 2.5Y

B horizons:
Texture: loam or channery loam

Pilotpeak Series

Map unit(s): 148
Local phase(s): none specified
Depth class: shallow
Drainage class: somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: convex slopes on plateaus
Parent material: residuum derived from interbedded conglomerate and sandstone
Elevation: 7,500 to 8,000 feet (2,286 to 2,438 meters)
Slope: 3 to 12 percent
Climatic data:
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Loamy-skeletal, mixed Borollic Lithic Calciorthids

Typical Pedon

Map unit in which located: Pilotpeak-Grubrob complex, 1 to 12 percent slopes
Location in the survey area: about 2,500 feet west and 200 feet south of the northeast corner of sec. 19, T. 12 N., R. 102 W.

A—0 to 2 inches; brown (10YR 5/3) gravelly sandy loam, dark brown (10YR 4/3) moist; single grained; loose, nonsticky and nonplastic; 25 percent gravel; slightly effervescent; moderately alkaline; abrupt smooth boundary.
Bw—2 to 6 inches; yellowish brown (10YR 5/4) very gravelly sandy loam, dark yellowish brown (10YR 4/4) moist; weak fine granular structure; soft, very friable, slightly sticky and slightly plastic; 35 percent gravel, 5 percent cobbles; strongly

effervescent; moderately alkaline; abrupt wavy boundary.
Bk—6 to 17 inches; very pale brown (10YR 7/4) extremely gravelly sandy loam, yellowish brown (10YR 5/4) moist; massive; soft, friable, nonsticky and nonplastic; 55 percent gravel, 5 percent cobbles; 25 percent calcium carbonate equivalent; moderately alkaline; clear wavy boundary.
R—17 inches; hard conglomerate bedrock.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 12 to 17 percent
Calcium carbonate equivalent: 20 to 35 percent
Depth to bedrock: 10 to 20 inches
Hue: 10YR or 7.5YR

Bw horizon: (if present)
Texture: gravelly sandy loam or very gravelly sandy loam
Rock fragment content: 15 to 40 percent.

Bk horizon:
Texture: extremely gravelly sandy loam or very gravelly sandy loam
Rock fragment content: 50 to 65 percent, predominantly gravel

Pinelli Series

Map unit(s): 82, 149, 150, 151, 184
Local phase(s): dry
Depth class: very deep
Drainage class: well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Landform: alluvial fans, benches, hills
Position on landform: footslopes, toeslopes
Parent material: alluvium derived from shale, alluvium derived from shale and in loess, loess, loess and residuum derived from shale, residuum derived from shale
Elevation: 6,200 to 7,400 feet (1,890 to 2,256 meters)
Slope: 3 to 25 percent
Climatic data:
Mean annual precipitation: 10 to 15 inches (254 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine, montmorillonitic Borollic Haplargids

Typical Pedon

Map unit in which located: Pinelli loam, 3 to 12 percent slopes
Location in the survey area: about 900 feet east and 850 feet north of the southwest corner of sec. 8, T. 4 N., R. 93 W.

A—0 to 6 inches; brown (10YR 5/3) loam, dark brown (10YR 4/3) moist; weak fine granular structure; soft, very friable, slightly sticky and slightly plastic; mildly alkaline; clear smooth boundary.
Bt—6 to 18 inches; yellowish brown (10YR 5/4) clay loam, dark brown (10YR 4/3) moist; moderate medium prismatic structure parting to moderate medium subangular blocky; very hard, firm, sticky and plastic; many faint clay films on faces of peds and in root channels; mildly alkaline; clear smooth boundary.
Btk1—18 to 25 inches; yellowish brown (10YR 5/4) clay loam, dark brown (10YR 4/3) moist; moderate medium prismatic structure parting to moderate medium subangular blocky; hard, firm, sticky and plastic; few faint clay films on faces of peds and in root channels; few fine concentrations of calcium carbonate; strongly effervescent; moderately alkaline; clear smooth boundary.
Btk2—25 to 30 inches; pale brown (10YR 6/3) clay loam, brown (10YR 5/3) moist; moderate medium subangular blocky structure parting to weak fine subangular blocky; hard, firm, sticky and plastic; very few faint clay films on faces of peds; few fine concentrations of calcium carbonate; strongly effervescent; moderately alkaline; clear smooth boundary.
Bk—30 to 60 inches; pale brown (10YR 6/3) clay loam, brown (10YR 5/3) moist; weak medium subangular blocky structure; hard, firm, sticky and plastic; common fine concentrations of calcium carbonate; strongly effervescent; moderately alkaline.

Range in Characteristics

Depth to argillic horizon: 22 to 30 inches
Depth to effervescence: 15 to 30 inches
Note: In the map units #150 of Pinelli clay loam, 3 to 15 percent slopes and #149 Pinelli loam, 3 to 12 percent slopes, layers of sandy clay loam are present. In the map unit #151 of Pinelli loam, dry, 3 to 8 percent slopes, layers with sandy clay and

sandy clay loam textures occur. This unit is phase dry as it is in a dry part of the survey area.

A horizon:
Texture: loam or fine sandy loam
Reaction: neutral or mildly alkaline

Bt horizon:
Hue: 7.5YR to 2.5Y
Texture: silty clay loam, clay loam, or clay
Reaction: neutral to moderately alkaline

Bk horizon:
Hue: 7.5YR to 2.5Y
Texture: loam or clay loam

Pinerid Series

Map unit(s): 255
Depth class: shallow
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: mountain slopes
Parent material: slope alluvium derived from dolomitic limestone
Elevation: 7,500 to 9,000 feet (2,286 to 2,743 meters)
Slope: 8 to 25 percent
Climatic data:
Mean annual precipitation: 16 to 22 inches (406 to 559 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Frost-free period: 70 to 90 days

Taxonomic class: Loamy-skeletal, carbonatic, frigid Lithic Calciustolls

Typical Pedon

Map unit in which located: Clyl-Pinerid association, 8 to 40 percent slopes, from the Uintah Area, Utah Soil Survey
Location in the Uintah Area, Utah survey area: about 30 miles northeast of Vernal, Utah; about 650 feet north and 800 feet west of the southeast corner of sec. 30, T. 1 S., R. 24 E., SLBM; Blair Basin, Utah USGS quadrangle; latitude 40 degrees, 41 minutes, 59 seconds north and longitude 109 degrees, 15 minutes, 34 seconds west; NAD 27.

The soil surface is covered by 35 percent channers and 5 percent flagstones.

A—0 to 2 inches; yellowish brown (10YR 5/4) very channery silt loam, dark brown (10YR 3/3) moist; moderate thin platy structure parting to moderate fine and very fine subangular blocky; soft, very friable, slightly sticky and slightly plastic; few coarse, medium and fine, common very fine roots; common fine and many very fine vesicular pores; 20 percent channers; slightly effervescent; calcium carbonate is disseminated; moderately alkaline (pH 8.3); abrupt smooth boundary.

Bk1—2 to 6 inches; brown (10YR 5/3) very channery silt loam, dark brown (10YR 3/3) moist; moderate fine and very fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; few coarse and medium, many fine and very fine roots; common fine and many very fine tubular pores; 50 percent channers; slightly effervescent; calcium carbonate is disseminated and segregated as coatings less than 1 mm thick on undersides of rock fragments; moderately alkaline (pH 8.2); clear wavy boundary.

Bk2—6 to 11 inches; light yellowish brown (10YR 6/4) extremely channery silt loam, brown (10YR 4/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few medium, common fine and many very fine roots; common fine and very fine tubular pores; 75 percent channers; strongly effervescent; calcium carbonate is disseminated and segregated as coatings 1 to 3 mm thick on underside of rock fragments; moderately alkaline (pH 8.2); abrupt smooth boundary.

Bk3—11 to 13 inches; light yellowish brown (10YR 6/4) extremely channery silt loam, brown (10YR 5/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few medium, common fine and many very fine roots; common fine and very fine tubular pores; 90 percent channers; strongly effervescent; calcium carbonate is disseminated and segregated as many medium irregular masses and coatings 1 to 3 mm thick on rock fragments; moderately alkaline (pH 8.2); abrupt smooth boundary.

R—13 inches; unweathered dolomitic limestone.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 18 to 27 percent
Rock fragment content: 60 to 80 percent rock fragments, predominantly channers derived from dolomitic limestone
Surface rock fragment content: 35 to 60 percent, predominantly channers derived from dolomitic limestone
Calcium carbonate equivalent: 50 to 60 percent calcium carbonate equivalent in the less-than-20 mm fraction
Depth to calcic horizon: 6 to 12 inches

Depth to lithic contact: 10 to 20 inches to dolomitic limestone
Mean annual soil temperature: 42 to 45 degrees F.
Moisture control section: is affected by precipitation that falls evenly throughout the year with a slight increase in late summer and early fall
Thickness of the mollic epipedon: 7 to 9 inches after mixing
Note: This soil occurs in a zone that is considered to have a typic ustic moisture regime; however, due to the windswept nature of this soil's setting, it has an ustic soil moisture regime bordering on aridic

A horizon:
Hue: 7.5YR or 10YR
Value: 5 dry, 4 moist
Chroma: 3 or 4 dry, 2 or 3 moist
Texture: very channery silt loam
Rock fragment content: 35 to 59 percent channers and flagstones after mixing surface fragments
Calcium carbonate equivalent: 20 to 40 percent

Bk1 horizon:
Hue: 7.5YR or 10YR
Value: 5 or 6 dry, 3 or 4 moist
Chroma: 3 or 4 dry and moist
Texture: very channery silt loam or extremely channery silt loam
Rock fragment content: 35 to 60 percent channers and flagstones
Calcium carbonate equivalent: 30 to 50 percent

Bk2 and Bk3 horizons:
Hue: 7.5YR or 10YR
Value: 6 dry, 4 or 5 moist
Chroma: 3 or 4 dry and moist
Texture: extremely channery silt loam or extremely flaggy silt loam
Rock fragment content: 60 to 90 percent channers and flagstones
Calcium carbonate equivalent: 50 to 60 percent

Pinridge Series

Map unit(s): 152
Local phase(s): none specified
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: alluvial fans, stream terraces
Parent material: alluvium derived from sedimentary rock
Elevation: 6,400 to 7,200 feet (1,951 to 2,195 meters)
Slope: 1 to 12 percent
Climatic data:
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine-loamy, mixed Cumulic Haploborolls

Typical Pedon

Map unit in which located: Pinridge loam, 1 to 12 percent slopes
Location in the survey area: about 100 feet north and 700 feet east of the southwest corner of sec. 32, T. 8 N., R. 93 W.

A1—0 to 5 inches; dark grayish brown (10YR 4/2) loam, very dark grayish brown (10YR 3/2) moist; moderate coarse platy structure; slightly hard, very friable, slightly sticky and slightly plastic; slightly effervescent; mildly alkaline; clear wavy boundary.
A2—5 to 16 inches; brown (10YR 5/3) sandy clay loam, dark brown (10YR 3/3) moist; weak coarse subangular blocky structure parting to weak medium subangular blocky; slightly hard, friable, sticky and plastic; slightly effervescent; mildly alkaline; clear wavy boundary.
A3—16 to 20 inches; grayish brown (10YR 5/2) sandy clay loam, very dark grayish brown (10YR 3/2) moist; 30 percent very coarse platy rock structure and 70 percent weak medium subangular blocky structure; hard, friable, sticky and plastic; slightly effervescent; mildly alkaline; clear wavy boundary.
Bk1—20 to 27 inches; 60 percent dark grayish brown (10YR 4/2) and 40 percent pale brown (10YR 6/3) sandy clay loam, very dark grayish brown (10YR 3/2) and brown (10YR 4/3) moist; weak coarse subangular blocky structure; hard, friable, sticky and plastic; few fine filaments of calcium carbonate; strongly effervescent; moderately alkaline; clear wavy boundary.
Bk2—27 to 41 inches; grayish brown (2.5Y 5/2) sandy clay loam, dark grayish brown (2.5Y 4/2) moist; moderate coarse subangular blocky structure; hard, friable, sticky and plastic; common filaments of calcium carbonate; strongly effervescent; moderately alkaline; clear wavy boundary.
Bk3—41 to 60 inches; light olive brown (2.5Y 5/4) sandy loam, dark grayish brown (2.5Y 4/2) moist; weak medium subangular blocky structure; soft,

very friable, slightly sticky and slightly plastic; few fine filaments of calcium carbonate; strongly effervescent; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Note: The control section generally is free of rock fragments, but thin lenses containing up to 15 percent gravel may occur in some pedons.
Depth to secondary calcium carbonate: 15 to 30 inches
Thickness of the mollic epipedon: 16 to 25 inches

Bk1 horizon:
Hue: 10YR or 2.5Y
Texture: loam, clay loam, or sandy clay loam
Reaction: mildly alkaline or moderately alkaline

Bk2 or Bk3 horizons:
Hue: 10YR or 2.5Y
Texture: sandy loam, loam, sandy clay loam, or clay loam with thin lenses of loamy sand in some pedons
Reaction: mildly alkaline or moderately alkaline

Powderwash Series

Map unit(s): 173
Local phase(s): none specified
Depth class: moderately deep
Drainage class: well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Landform: benches, hillslopes
Parent material: eolian deposits over residuum derived from sandstone and shale
Elevation: 6,100 to 6,800 feet (1,859 to 2,073 meters)
Slope: 2 to 15 percent
Climatic data:
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Coarse-loamy over clayey, mixed Borollic Haplargids

Typical Pedon

Map unit in which located: Ryark-Powderwash complex, 2 to 15 percent slopes
Location in the survey area: about 2,000 feet north and 5 feet east of the southwest corner of sec. 30, T. 11 N., R. 94 W.

A—0 to 3 inches; pale brown (10YR 6/3) loamy sand, dark brown (10YR 3/3) moist; weak medium platy structure parting to weak fine granular; soft, very friable, nonsticky and nonplastic; neutral; abrupt smooth boundary.
Bt1—3 to 6 inches; brown (10YR 4/3) sandy clay loam, dark brown (10YR 4/3) moist; moderate medium prismatic structure parting to moderate coarse subangular blocky; hard, firm, sticky and slightly plastic; common distinct clay films on faces of peds; neutral; clear wavy boundary.
Bt2—6 to 15 inches; yellowish brown (10YR 5/4) sandy loam, brown (10YR 4/3) moist; moderate medium prismatic structure parting to moderate coarse subangular blocky; slightly hard, friable, slightly sticky and nonplastic; few faint clay films on faces of peds; neutral; clear wavy boundary.
2BC—15 to 22 inches; light yellowish brown (10YR 6/4) coarse sandy loam, brown (10YR 5/3) moist; moderate medium prismatic structure; soft, very friable, nonsticky and nonplastic; 10 percent fine gravel; neutral; abrupt smooth boundary.
3BC—22 to 28 inches; light olive brown (2.5Y 5/4) and pale yellow (2.5Y 7/3) clay, olive brown (2.5Y 4/4) and light olive brown (2.5Y 5/3) moist; moderate medium prismatic structure; very hard, firm, sticky and plastic; mildly alkaline; clear wavy boundary.
3C—28 to 38 inches; greenish gray (5GY 6/1), pale yellow (5Y 7/3) and olive (5Y 5/4) clay, greenish gray (5GY 5/1) and olive (5Y 5/3 and 5Y 4/4) moist; massive; very hard, firm, sticky and plastic; 30 percent soft shale fragments; mildly alkaline; clear wavy boundary.
3Crk1—38 to 48 inches; greenish gray (5GY 6/1) and olive (5Y 5/6) shale bedrock, greenish gray (5GY 5/1) and olive (5Y 4/4) moist; 15 percent visible soft white carbonate masses and streaks; strongly alkaline; gradual wavy boundary.
3Crk2—48 to 60 inches; greenish gray (5GY 6/1) and light reddish brown (5YR 6/3) shale bedrock; 5 percent soft white carbonate streaks; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 12 to 18 percent in the upper part
Depth to paralithic contact: 30 to 40 inches
Depth to secondary calcium carbonate: 25 to 40 inches

Bt horizon:
Hue: 7.5YR or 10YR
Texture: sandy loam or sandy clay loam

3BC and 3C horizons:
Depth to the 3BC or 3C horizon: 15 to 30 inches.

Hue: variegated 5GY through 2.5YR
Texture: clay loam or clay
Reaction: mildly alkaline or moderately alkaline

Pricecreek Series

Map unit(s): 153
Local phase(s): none specified
Depth class: very deep
Drainage class: well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Landform: hills, terraces
Position on landform: toeslopes
Parent material: alluvium derived from shale
Elevation: 5,800 to 6,300 feet (1,768 to 1,920 meters)
Slope: 0 to 4 percent
Climatic data:
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine, montmorillonitic Borollic Camborthids

Typical Pedon

Map unit in which located: Pricecreek clay loam, 0 to 4 percent slopes
Location in the survey area: about 2,200 feet west and 4,200 feet north of the southwest corner of sec. 12, T. 3 N., R. 97 W.

A—0 to 4 inches; light brownish gray (2.5Y 6/2) clay loam, dark grayish brown (10YR 4/2) moist; moderate fine granular structure; soft, friable, sticky and plastic; strongly effervescent; moderately alkaline; clear smooth boundary.
AB—4 to 8 inches; light brownish gray (2.5Y 6/2) clay loam, grayish brown (2.5Y 5/2) moist; weak medium subangular blocky structure parting to moderate fine platy; soft, friable, sticky and plastic; strongly effervescent; strongly alkaline; clear wavy boundary.
Bw1—8 to 14 inches; light brownish gray (2.5Y 6/2) clay loam, olive brown (2.5Y 4/3) moist; moderate medium and coarse subangular blocky structure; hard, friable, sticky and plastic; strongly effervescent; strongly alkaline; clear wavy boundary.
Bw2—14 to 21 inches; light brownish gray (2.5Y 6/2) clay loam, olive brown (2.5Y 4/3) moist; moderate medium and coarse angular blocky structure; very hard, firm, very sticky and very plastic; strongly effervescent; strongly alkaline; clear wavy boundary.
Bn1—21 to 25 inches; light yellowish brown (2.5Y 6/3) clay loam, olive brown (2.5Y 4/4) moist; weak coarse angular blocky structure; very hard, firm, very sticky and very plastic; 2 percent thin white (N8) threads of salts; slightly effervescent; very strongly alkaline; gradual wavy boundary.
Bn2—25 to 35 inches; light yellowish brown (2.5Y 6/3) clay loam, olive brown (2.5Y 4/4) moist; weak coarse angular blocky structure parting to weak medium platy; very hard, firm, very sticky and very plastic; 2 percent thin white (N8) threads of salts; strongly effervescent; very strongly alkaline; clear wavy boundary.
C1—35 to 45 inches; light yellowish brown (2.5Y 6/3) clay loam, light olive brown (2.5Y 5/4) moist; weak coarse subangular blocky structure and weak medium platy rock structure; very hard, firm, very sticky and very plastic; strongly effervescent; strongly alkaline; gradual wavy boundary.
C2—45 to 60 inches; light yellowish brown (2.5Y 6/3) clay loam, light yellowish brown (2.5Y 6/4) moist; weak fine and coarse platy rock structure; very hard, firm, sticky and very plastic; strongly effervescent; strongly alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 35 to 50 percent clay with 15 to 30 percent fine sand and coarser
Depth to cambic horizon: 12 to 30 inches
Depth to secondary salts: 20 to 40 inches

A horizon:
Hue: 2.5Y or 10YR

Bw horizons:
Hue: 2.5Y or 10YR
Texture: clay, clay loam, or silty clay loam

Bn horizons:
Hue: 2.5Y or 10YR
Texture: clay, clay loam, or silty clay loam
Reaction: strongly alkaline or very strongly alkaline with at least one very strongly alkaline subhorizon

C horizons:
Hue: 2.5Y or 10YR
Texture: clay, clay loam, or silty clay loam
Reaction: moderately alkaline or strongly alkaline

Quealman Series

Map unit(s): 154
Local phase(s): none specified
Depth class: very deep
Drainage class: well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: flood plains, low terraces
Parent material: alluvium derived from mixed sources
Elevation: 6,000 to 7,000 feet (1,829 to 2,134 meters)
Slope: 0 to 3 percent
Climatic data:
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Coarse-loamy, mixed (calcareous), frigid Typic Torrifluvents

Typical Pedon

Map unit in which located: Quealman sand, 0 to 3 percent slopes
Location in the survey area: about 1,500 feet north and 500 feet west of the southeast corner of sec. 25, T. 11 N., R. 100 W.

A—0 to 3 inches; light brownish gray (10YR 6/2) sand, grayish brown (10YR 5/2) moist; single grained; loose, nonsticky and nonplastic; strongly effervescent; mildly alkaline; clear smooth boundary.
C1—3 to 15 inches; pale brown (10YR 6/3) sandy loam, brown (10YR 5/3) moist; platy rock structure; soft, very friable, nonsticky and nonplastic; strongly effervescent; mildly alkaline; abrupt smooth boundary.
C2—15 to 16 inches; light brownish gray (2.5Y 6/2) sandy loam, grayish brown (2.5Y 5/2) moist; platy rock structure; soft, very friable, nonsticky and nonplastic; slightly effervescent; mildly alkaline; abrupt smooth boundary.
C3—16 to 32 inches; light brownish gray (2.5Y 6/2) fine sandy loam, grayish brown (2.5Y 5/2) moist; platy rock structure; soft, very friable, nonsticky and nonplastic; slightly effervescent; mildly alkaline; abrupt smooth boundary.
C4—32 to 40 inches; light yellowish brown (2.5Y 6/4) sandy loam, light olive brown (2.5Y 5/4) moist; platy rock structure; soft, very friable, nonsticky and nonplastic; strongly effervescent; mildly alkaline; clear smooth boundary.
C5—40 to 60 inches; light yellowish brown (2.5Y 6/4) loamy sand, light olive brown (2.5Y 5/4) moist; massive; soft, very friable, nonsticky and nonplastic; strongly effervescent; mildly alkaline.

Range in Characteristics

Particle-size control section:
Rock fragment content: 0 to 15 percent gravel
Hue: 2.5Y or 10YR
Note: This soil is outside the range of the Quealman series because it is well drained.

C horizons:
Texture: stratified fine sandy loam, sandy loam, and loamy sand
Clay content: 10 to 15 percent

Quilt Series

Map unit(s): 24
Local phase(s): none specified
Depth class: very deep
Drainage class: well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Landform: hills
Position on landform: shoulders, backslopes
Parent material: colluvium and residuum derived from interbedded shale and sandstone
Elevation: 7,200 to 8,300 feet (2,195 to 2,530 meters)
Slope: 20 to 45 percent
Climatic data:
Mean annual precipitation: 15 to 17 inches (381 to 432 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine, montmorillonitic Typic Argiborolls

Typical Pedon

Map unit in which located: Bulkley-Quilt complex, 12 to 45 percent slopes
Location in the survey area: about 400 feet south and 1,500 feet east of the northwest corner of sec. 10, T. 4 N., R. 103 W.

A—0 to 7 inches; grayish brown (10YR 5/2) channery loam, very dark grayish brown (10YR 3/2) moist; strong fine granular structure; soft, very friable, slightly sticky and slightly plastic; 20 percent channers; mildly alkaline; clear wavy boundary.
BA—7 to 12 inches; grayish brown (10YR 5/2) channery clay loam, very dark grayish brown (10YR 3/2) moist; strong fine angular blocky structure; slightly hard, friable, sticky and plastic;

15 percent channers; mildly alkaline; clear wavy boundary.
Bt1—12 to 19 inches; brown (10YR 5/3) channery clay loam, dark brown (10YR 4/3) moist; strong medium angular blocky structure parting to strong fine angular blocky; hard, firm, sticky and plastic; few faint clay films on faces of peds; 15 percent channers; mildly alkaline; clear wavy boundary.
Bt2—19 to 38 inches; brown (10YR 5/3) channery clay loam, brown (10YR 4/3) moist; moderate medium subangular blocky structure; hard, firm, sticky and plastic; few faint clay films on faces of peds; 30 percent channers; mildly alkaline; abrupt smooth boundary.
2BC—38 to 48 inches; pale brown (10YR 6/3) channery clay, brown (10YR 5/3) moist; moderate medium and coarse subangular blocky structure; hard, firm, sticky and plastic; 20 percent channers, 20 percent soft shale fragments; mildly alkaline; abrupt wavy boundary.
2Bk—48 to 60 inches; light gray (2.5Y 7/2) channery clay, light brownish gray (2.5Y 6/2) moist; massive; hard, very firm, sticky and plastic; 20 percent channers, 40 percent soft shale fragments; strongly effervescent; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 20 to 35 percent
Depth to secondary calcium carbonate: of 40 to 60 inches
Thickness of the mollic epipedon: 10 to 16 inches

Bt horizons:
Hue: The 10YR hue is outside the range of the series and is noted only in correlation.
Texture: channery clay or channery clay loam; thin discontinuous horizons of extremely channery clay loam occur in some pedons
Reaction: neutral or mildly alkaline

Bk horizons:
Hue: 10YR or 2.5Y (The 10YR hue in the Bt horizon is outside the range of the series and is noted only in correlation.)

Rencot Series

Map unit(s): 155
Local phase(s): none specified
Depth class: very shallow to shallow
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: plateaus
Parent material: residuum derived from limestone
Elevation: 7,000 to 8,500 feet (2,134 to 2,591 meters)
Slope: 1 to 25 percent
Climatic data:
Mean annual precipitation: 13 to 17 inches (330 to 432 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Loamy-skeletal, mixed Borollic Lithic Calciorthids

Typical Pedon

Map unit in which located: Rencot-Duffymont complex, 1 to 25 percent slopes
Location in the survey area: about 1,400 feet north and 1,600 feet west of the southeast corner of sec. 10, T. 5 N., R. 101 W.

A—0 to 2 inches; brown (7.5YR 5/4) extremely channery loam, dark brown (7.5YR 3/4) moist; weak fine granular structure; soft, very friable, slightly sticky and slightly plastic; 50 percent channers, 20 percent flagstones; strongly effervescent; moderately alkaline; clear smooth boundary.
BA—2 to 7 inches; light brown (7.5YR 6/4) extremely channery loam, brown (7.5YR 4/4) moist; weak medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; 50 percent channers, 20 percent flagstones; calcium carbonate pendants on rock fragments; 17 percent calcium carbonate equivalent; violently effervescent; moderately alkaline; clear smooth boundary.
Bk—7 to 13 inches; pink (7.5YR 7/4) extremely channery loam, light brown (7.5YR 6/4) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; slightly hard, friable, slightly sticky and slightly plastic; 50 percent channers, 20 percent flagstones; calcium carbonate pendants on rock fragments; 40 percent calcium carbonate equivalent; violently effervescent; moderately alkaline; abrupt smooth boundary.
R—13 inches; hard limestone bedrock.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 18 to 27 percent clay
Rock fragment content: 50 to 75 percent
Calcium carbonate equivalent: 20 to 40 percent
Depth to lithic contact: 7 to 20 inches

Hue: 10YR or 7.5YR
Note: This Rencot soil is outside the range of the Rencot series because the depth to lithic contact ranges from 7 to 20 inches and the mean annual precipitation is 15 to 17 inches.

B horizon:
Texture: extremely channery loam, extremely flaggy loam, or very channery loam

Renegade Series

Map unit(s): 251
Local phase(s): none specified
Depth class: deep
Drainage class: well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: hills
Parent material: colluvium over residuum derived from shale and sandstone
Elevation: 6,200 to 7,800 feet (1,890 to 2,377 meters)
Slope: 50 to 80 percent
Climatic data:
Mean annual precipitation: 16 to 22 inches (406 to 559 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Frost-free period: 70 to 90 days

Taxonomic class: Loamy-skeletal, mixed, superactive, frigid Typic Haplustolls

Typical Pedon

Map unit in which located: Renegade very flaggy fine sandy loam, 50 to 80 percent slopes, from the Uintah Area, Utah Soil Survey
Location in the Uintah Area, Utah survey area: about 1 1/2 miles southeast of Ruple Point on Blue Mountain; about 2,400 feet east and 2,500 feet south of the northwest corner of sec. 19, T. 4 S., R. 25 E., SLBM; Split Mountain, Utah USGS quadrangle; latitude 40 degrees, 27 minutes, 31 seconds, north and longitude 109 degrees, 08 minutes, 43 seconds west; NAD 27.

The soil surface is covered by about 5 percent angular stones, 15 percent flagstones, and 10 percent channers. The fragments are of hard, fine-grained sandstone. There is 1 inch of undecomposed leaves, needles, and twigs.

A1—0 to 4 inches; dark brown (10YR 3/3) very flaggy fine sandy loam, very dark grayish brown (10YR 3/2) moist; weak fine granular structure; soft, friable, nonsticky and nonplastic; common very fine and fine roots; common very fine and fine, few medium tubular pores; 20 percent flagstones; very slightly effervescent; calcium carbonate is disseminated; slightly alkaline (pH 7.4); clear smooth boundary.
A2—4 to 15 inches; dark brown (7.5YR 3/3) flaggy fine sandy loam, very dark grayish brown (7.5YR 3/2) moist; moderate fine subangular blocky structure parting to moderate very fine granular; soft, friable, nonsticky and nonplastic; common very fine and fine, few medium and coarse roots; common very fine and fine, few medium tubular pores; 15 percent flagstones, 5 percent angular gravel, and 5 percent angular cobbles; very slightly effervescent; calcium carbonate is disseminated; slightly alkaline (pH 7.6); gradual wavy boundary. (The combined thickness of the A horizons is 10 to 15 inches.)
C1—15 to 35 inches; dark yellowish brown (10YR 4/4) very flaggy fine sandy loam, dark yellowish brown (10YR 3/4) moist; weak medium and fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine, few medium and coarse roots; common very fine, fine, and medium tubular pores; 30 percent flagstones, 10 percent angular cobbles, and 5 percent angular gravel; slightly effervescent; calcium carbonate is disseminated; slightly alkaline (pH 7.6); gradual wavy boundary.
C2—35 to 47 inches; yellowish brown (10YR 5/4) very flaggy fine sandy loam, dark yellowish brown (10YR 4/4) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine, few medium and coarse roots; common very fine and fine tubular pores; 20 percent flagstones, 15 percent angular cobbles, and 10 percent angular gravel; slightly effervescent; calcium carbonate is disseminated; slightly alkaline (pH 7.7); gradual wavy boundary.
C3—47 to 58 inches; yellowish brown (10YR 5/4) very flaggy sandy loam, dark yellowish brown (10YR 4/4) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine, few medium roots; few very fine tubular pores; 20 percent flagstones, 15 percent angular cobbles, and 10 percent angular gravel; slightly effervescent; calcium carbonate is disseminated; moderately alkaline (pH 8.0); gradual wavy boundary. (The combined thickness of the C horizons is 35 to 45 inches.)
Cr—58 inches; weathered sandstone bedrock.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 7 to 18 percent
Rock fragment content: 35 to 70 percent rocks, predominantly flagstones and channers derived from sandstone and shale lithology
Surface rock fragments: 25 to 50 percent, predominantly flagstones and channers with smaller amounts of stones and boulders derived from sandstone and shale lithology
Depth to paralithic contact: 40 to 60 inches to weathered shale or sandstone
Mean annual soil temperature: 42 to 45 degrees F.
Moisture control section: is affected by precipitation that falls evenly throughout the year with a slight increase in late summer and early fall
Moisture regime: typic ustic
Thickness of the mollic epipedon: 10 to 15 inches

A horizon:
Hue: 5YR to 10YR
Value: 3 or 4 dry, 2 or 3 moist
Chroma: 2 or 3 dry or moist
Texture: flaggy fine sandy loam or very flaggy fine sandy loam
Rock fragment content: 15 to 50 percent channers and flagstones after mixing surface fragments
Calcium carbonate equivalent: 1 to 10 percent
Reaction: slightly alkaline or moderately alkaline

C horizon:
Hue: 5YR to 10YR
Value: 4 to 6 dry, 3 to 5 moist
Chroma: 4 to 6 dry or moist
Texture: very flaggy fine sandy loam or very flaggy sandy loam
Rock fragment content: 35 to 59 percent flagstones, channers, angular gravel, or cobbles
Calcium carbonate equivalent: 1 to 10 percent
Reaction: slightly alkaline or moderately alkaline

Rentsac Series

Map unit(s): 138, 156, 157
Local phase(s): none specified
Depth class: shallow
Drainage class: somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: hills
Parent material: residuum derived from sandstone
Elevation: 5,800 to 7,000 feet (1,768 to 2,134 meters)
Slope: 15 to 65 percent
Climatic data:
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Loamy-skeletal, mixed (calcareous), frigid Lithic Ustic Torriorthents

Typical Pedon

Map unit in which located: Rentsac-Moyerson complex, 25 to 65 percent slopes
Location in the survey area: about 50 feet west and 750 feet north of the southeast corner of sec. 33, T. 5 N., R. 98 W.

A—0 to 2 inches; pale brown (10YR 6/3) very channery sandy loam, brown (10YR 4/3) moist; weak fine granular structure; soft, very friable, nonsticky and nonplastic; 35 percent channers; strongly effervescent; moderately alkaline; abrupt smooth boundary.
Bk—2 to 6 inches; pale brown (10YR 6/3) very channery sandy loam, brown (10YR 5/3) moist; weak fine granular structure; soft, very friable, nonsticky and nonplastic; 40 percent channers; strongly effervescent; disseminated lime; moderately alkaline; clear wavy boundary.
C—6 to 10 inches; very pale brown (10YR 7/3) very channery sandy loam, pale brown (10YR 6/3) moist; massive; soft, very friable, nonsticky and nonplastic; 50 percent channers; strongly effervescent; moderately alkaline; abrupt smooth boundary.
R—10 inches; hard fractured sandstone bedrock.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 10 to 18 percent
Rock fragment content: 35 to 60 percent, dominantly less than 6 inches in diameter
Depth to lithic contact: 10 to 20 inches
Hue: 10YR or 2.5Y

Rizno Series

Map unit(s): 243
Local phase(s): none specified
Depth class: very shallow to shallow
Drainage class: well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)

Landform: cuestas
Parent material: slope alluvium and/or colluvium over residuum weathered from limestone and sandstone
Elevation: 5,400 to 6,400 feet (1,646 to 1,951 meters)
Slope: 3 to 25 percent
Climatic data:
Mean annual precipitation: 10 to 12 inches (254 to 305 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Frost-free period: 90 to 105 days

Taxonomic class: Loamy, mixed, superactive, calcareous, mesic Lithic Ustic Torriorthents

Typical Pedon

Map unit in which located: Windcomb-Rizno-Anasazi complex, 3 to 25 percent slopes, extremely flaggy, from the Dinosaur National Monument Soil Survey
Location in the Dinosaur National Monument survey area: about 1,700 feet east and 2,500 feet south of the northwest corner, section 2, T. 6 N., R. 103 W., NMPM latitude 40 degrees, 30 minutes, 5 seconds N. and longitude 108 degrees, 56 minutes, 28 seconds W.

The soil surface is covered with sandstone rock fragments, consisting of 5 percent gravel, 1 percent cobbles, and 1 percent stones.

A—0 to 5 inches; reddish brown (5YR 5/4) cobbly fine sandy loam, reddish brown (5YR 4/3) moist; weak fine granular structure; soft, very friable, slightly sticky and slightly plastic; common very fine and fine roots; few fine tubular pores; 5 percent gravel, 10 percent cobbles, and 4 percent stones; calcium carbonate is disseminated; strongly effervescent; moderately alkaline; clear wavy boundary.
C—5 to 15 inches; light reddish brown (5YR 6/4) cobbly fine sandy loam, reddish brown (5YR 4/4) moist; weak fine and medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine and fine roots; few fine tubular pores; 10 percent gravel, 15 percent cobbles, and 7 percent stones; calcium carbonate is disseminated; strongly effervescent; moderately alkaline; abrupt irregular boundary.
R—15 inches; hard calcareous sandstone.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 10 to 18 percent
Rock fragment content: 0 to 35 percent
Depth to bedrock: 4 to 20 inches

A horizon:
Value: 5 or 6 dry, 4 or 5 moist
Chroma: 3 to 6
Reaction: slightly alkaline or moderately alkaline

C horizon:
Hue: 2.5YR or 5YR
Value: 5 or 6 dry, 4 or 5 moist
Chroma: 4 to 6
Texture: fine sandy loam or loam modified by 0 to 35 percent gravel or cobbles
Reaction: moderately alkaline or strongly alkaline

Rock River Series

Map unit(s): 30, 161, 162, 163, 164
Local phase(s): none specified
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: alluvial fans, benches, hillslopes, plateaus, convex positions on plateaus
Parent material: eolian deposits and in alluvium derived from sandstone, eolian deposits and residuum derived from sandstone, residuum derived from sandstone
Elevation: 6,000 to 7,300 feet (1,829 to 2,225 meters)
Slope: 0 to 25 percent
Climatic data:
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine-loamy, mixed Borollic Haplargids

Typical Pedon

Map unit in which located:
Rock River sandy loam, 3 to 12 percent slopes
Location in the survey area: about 600 feet east and 250 feet north of the southwest corner of sec. 23, T. 9 N., R. 95 W.

A—0 to 3 inches; dark yellowish brown (10YR 4/4) sandy loam, dark brown (10YR 3/3) moist; weak medium platy structure; soft, very friable, slightly sticky and slightly plastic; few fine roots; neutral; abrupt smooth boundary.
Bt1—3 to 7 inches; brown (7.5YR 5/4) sandy clay loam, dark brown (7.5YR 4/4) moist; weak coarse subangular blocky structure; hard, firm, sticky and plastic; few fine roots; very few faint clay films on faces of peds and in root channels; neutral; clear smooth boundary.
Bt2—7 to 16 inches; light brown (7.5YR 6/4) sandy clay loam, brown (7.5YR 4/4) moist; weak coarse prismatic structure parting to moderate medium subangular blocky; hard, firm, sticky and plastic; few fine and medium roots; few faint clay films on faces of peds; mildly alkaline; gradual smooth boundary.
Bt3—16 to 22 inches; light yellowish brown (10YR 6/4) sandy clay loam, yellowish brown (10YR 5/4) moist; weak coarse subangular blocky structure; hard, firm, sticky and plastic; few faint clay films on faces of peds; few fine roots in upper part of the horizon; mildly alkaline; clear smooth boundary.
Bk1—22 to 32 inches; light yellowish brown (10YR 6/4) sandy clay loam, light yellowish brown (10YR 6/4) moist; massive; hard, firm, sticky and slightly plastic; strongly effervescent; moderately alkaline; gradual smooth boundary.
Bk2—32 to 60 inches; very pale brown (10YR 7/4) sandy loam, brown (10YR 5/3) moist; massive; hard, friable, slightly sticky and slightly plastic; strongly effervescent; moderately alkaline.

Range in Characteristics

Depth to argillic horizon: 15 to 25 inches
Depth to effervescence: 15 to 30 inches

Bt horizon:
Hue: 7.5YR or 10YR

Bk1 horizon:
Hue: 7.5YR or 10YR
Texture: sandy loam or sandy clay loam

Bk2 horizon:
Texture: sandy loam or sandy clay loam; some pedons have a texture of loamy sand below a depth of 40 inches

Rogrube Series

Map unit(s): 122, 165
Local phase(s): clay loam, sandy loam
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: concave slopes and wind sheltered positions on dissected plateaus, convex windswept positions on dissected plateaus, slightly convex and nearly level areas on dissected plateaus
Parent material: residuum derived from gypsiferous shale
Elevation: 6,600 to 7,200 feet (2,012 to 2,195 meters)
Slope: 1 to 12 percent
Climatic data:
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine-loamy, mixed, frigid Calcic Gypsiorthids

Typical Pedon

Map unit in which located: Leswill-Rogrube complex, 1 to 7 percent slopes
Location in the survey area: about 800 feet north and 100 feet east of the southwest corner of sec. 5, T. 11 N., R. 100 W.

A—0 to 3 inches; pale brown (10YR 6/3) loam, dark yellowish brown (10YR 4/4) moist; moderate medium platy structure; soft, very friable, slightly sticky and slightly plastic; 10 percent calcium carbonate equivalent; strongly effervescent; strongly alkaline; abrupt smooth boundary.
Bk1—3 to 13 inches; light yellowish brown (10YR 6/4) clay loam, dark yellowish brown (10YR 4/4) moist; moderate medium and coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; 16 percent calcium carbonate equivalent; calcium carbonate disseminated; strongly effervescent; strongly alkaline; clear smooth boundary.
Bk2—13 to 20 inches; light yellowish brown (10YR 6/4) clay loam, yellowish brown (10YR 5/4) moist; weak coarse subangular blocky structure; hard, firm, slightly sticky and slightly plastic; 35 percent calcium carbonate equivalent; common concentrations of calcium carbonate; violently effervescent; strongly alkaline; clear smooth boundary.
Bk3—20 to 28 inches; light yellowish brown (10YR 6/4) clay loam, yellowish brown (10YR 5/4) moist; massive; hard, firm, slightly sticky and slightly

plastic; 16 percent calcium carbonate equivalent; common concentrations of calcium carbonate; violently effervescent; strongly alkaline; clear wavy boundary.

Bky—28 to 36 inches; light yellowish brown (10YR 6/4) sandy clay loam, yellowish brown (10YR 5/4) moist; massive; very hard, firm, slightly sticky and slightly plastic; 14 percent calcium carbonate equivalent; 13 percent calcium sulfate; common concentrations of calcium carbonate and calcium sulfate; strongly effervescent; moderately alkaline; clear wavy boundary.

By1—36 to 48 inches; light yellowish brown (10YR 6/4) clay loam, yellowish brown (10YR 5/4) moist; massive; very hard, very firm, slightly sticky and slightly plastic; 9 percent calcium carbonate equivalent; 15 percent calcium sulfate; slightly effervescent; moderately alkaline; clear smooth boundary.

By2—48 to 60 inches; light yellowish brown (10YR 6/4) sandy clay loam, yellowish brown (10YR 5/6) moist; massive; hard, firm, slightly sticky and slightly plastic; 9 percent calcium carbonate equivalent; 10 percent calcium sulfate; slightly effervescent; moderately alkaline.

Range in Characteristics

Particle-size control section: 25 to 39 percent calcium sulfate plus calcium carbonate by weight; the product of the percentage of calcium sulfate and the thickness in centimeters of the gypsic horizon above 60 inches is 400 to 1,500)
Calcium carbonate equivalent: 20 to 30 percent
Depth to calcic horizon: 2 to 20 inches
Depth to effervescence: 0 to 2 inches
Depth to gypsic horizon: 22 to 45 inches; contains 5 to 10 percent more calcium sulfate than the underlying horizons
Note: The Bky horizon is absent in some pedons.

A horizon:
Texture: sandy loam, loam, or clay loam
Reaction: moderately alkaline or strongly alkaline

Bk horizons:
Texture: loam, clay loam, or silty clay loam
Reaction: moderately alkaline or strongly alkaline

By horizons:
Hue: 10YR to 5Y
Texture: sandy clay loam, clay loam, silty clay loam, or loam
Calcium sulfate: 5 to 25 percent
Reaction: mildly alkaline or moderately alkaline

Roto Series

Map unit(s): 241
Depth class: moderately deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: hills, mesas
Position on landform: summits, shoulders, backslopes
Parent material: slope alluvium and/or colluvium over residuum weathered from limestone and sandstone
Elevation: 6,500 to 7,500 feet (1,981 to 2,286 meters)
Slope: 3 to 45 percent
Climatic data:
Mean annual precipitation: 12 to 14 inches (305 to 356 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Loamy-skeletal, carbonatic, frigid Haplocalcidic Ustochrepts

Typical Pedon

Map unit in which located: Pensore-Roto complex, 3 to 45 percent slopes, very stony, from the Dinosaur National Monument Soil Survey
Location in the Dinosaur National Monument survey area: about 500 feet west and 1,350 feet south of the northeast corner of section 12, T. 6 N., R. 101 W., NMPM latitude 40 degrees, 29 minutes, 24 seconds N. and longitude 108 degrees, 41 minutes, 1 second W.

The soil surface is covered with 25 percent gravel, 10 percent cobbles, and 2 percent stones.

A—0 to 2 inches; brown (7.5YR 4/3) very gravelly loam, dark brown (7.5YR 3/3) moist; weak fine and medium platy structure parting to weak very fine granular; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine, common medium roots; few very fine vesicular pores; 30 percent gravel and 5 percent cobbles; calcium carbonate is disseminated; slightly effervescent; 5 percent calcium carbonate equivalent; slightly alkaline; clear smooth boundary.

Bk1—2 to 9 inches; pinkish gray (7.5YR 6/2) very gravelly loam, brown (7.5YR 5/3) moist; weak fine and medium subangular blocky structure; hard, firm, slightly sticky and plastic; common fine and medium roots; few very fine tubular pores; 30 percent gravel and 5 percent cobbles;

calcium carbonate is disseminated; strongly effervescent; 20 percent calcium carbonate equivalent; moderately alkaline; clear smooth boundary.
Bk2—9 to 22 inches; pink (7.5YR 7/3) extremely gravelly sandy clay loam, light brown (7.5YR 6/4) moist; weak fine subangular blocky structure; hard, firm, slightly sticky and plastic; few fine and medium roots; few very fine tubular pores; 55 percent gravel and 10 percent cobbles; many medium and coarse rounded calcium carbonate concretions; violently effervescent; 41 percent calcium carbonate equivalent; strongly alkaline; abrupt smooth boundary.
R—22 inches; hard limestone.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 10 to 27 percent
Rock fragment content: 35 to 65 percent
Calcium carbonate equivalent: 40 to 60 percent
Depth to bedrock: 20 to 40 inches
Depth to calcic horizon: 2 to 5 inches

A horizon:
Hue: 7.5YR or 10YR
Value: 4 or 5 dry, 3 or 4 moist
Chroma: 2 or 3
Reaction: slightly alkaline or moderately alkaline

Bk horizon:
Hue: 7.5YR or 10YR
Value: 5 to 8 dry, 4 to 7 moist
Chroma: 3 to 6
Texture: fine sandy loam, loam, or sandy clay loam modified by 35 to 65 percent gravel, cobbles, or stones
Reaction: moderately alkaline or strongly alkaline

Routt Series

Map unit(s): 166, 167
Local phase(s): none specified
Depth class: very deep
Drainage class: well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Landform: hills, mountainsides, plateaus
Position on landform: backslopes
Parent material: loess and residuum derived from shale
Elevation: 7,000 to 8,200 feet (2,134 to 2,499 meters)
Slope: 3 to 30 percent
Climatic data:
Mean annual precipitation: 16 to 20 inches (406 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Frost-free period: 50 to 75 days

Taxonomic class: Fine, montmorillonitic Cryic Pachic Paleborolls

Typical Pedon

Map unit in which located: Routt loam, 3 to 25 percent slopes
Location in the survey area: about 2,750 feet east and 900 feet south of the northwest corner of sec. 2, T. 5 N., R. 91 W.

Oi—0 to 2 inches; very dark brown (10YR 3/4) and dark brown (10YR 3/3) slightly decomposed leaves and twigs.
A1—2 to 10 inches; dark gray (10YR 4/1) loam, black (10YR 2/1) moist; weak very coarse to medium granular structure; slightly hard, friable, slightly sticky and slightly plastic; neutral; clear wavy boundary.
A2—10 to 27 inches; dark gray (10YR 4/1) loam, black (10YR 2/1) moist; moderate fine and medium granular structure; soft, very friable, slightly sticky and slightly plastic; neutral; clear wavy boundary.
E/B—27 to 33 inches; 80 percent gray (10YR 6/2) and 20 percent brown (10YR 5/3) clay loam, very dark gray (10YR 3/2) and dark brown (10YR 3/3) moist; moderate medium angular blocky structure; hard, friable, sticky and plastic; neutral; clear wavy boundary.
B/E—33 to 39 inches; 60 percent light olive brown (2.5Y 5/3) and 30 percent light brownish gray (2.5Y 6/2) clay, olive brown (2.5Y 3/3) and very dark grayish brown (2.5Y 3/2) moist; strong medium angular blocky structure; very hard, firm, very sticky and plastic; neutral; clear wavy boundary.
Bt—39 to 60 inches; light olive brown (2.5Y 5/3) clay, olive brown (2.5Y 4/4) moist; strong medium prismatic structure parting to moderate coarse angular blocky; very hard, firm, very sticky and plastic; few faint clay films on faces of peds; neutral.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 0 to 5 percent
Thickness of the mollic epipedon: 20 to 30 inches
Note: Depth to the base of the argillic horizon is 60 inches or more; depth to the top of the argillic horizon is 24 to 35 inches

E/B horizon:
Texture: loam or clay loam

Bt horizon:
Hue: 7.5YR through 2.5Y
Texture: clay loam or clay

Ruedloff Series

Map unit(s): 168, 169, 178
Local phase(s): none specified
Depth class: very deep
Drainage class: somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: benches, hills
Position on landform: backslopes, toeslopes
Parent material: alluvium derived from sandstone, eolian deposits and in alluvium derived from sandstone, residuum derived from sandstone
Elevation: 6,000 to 6,500 feet (1,829 to 1,981 meters)
Slope: 1 to 25 percent
Climatic data:
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Coarse-loamy, mixed, frigid Typic Haplargids

Typical Pedon

Map unit in which located: Simanni-Ruedloff complex, 1 to 10 percent slopes
Location in the survey area: about 2,500 feet west and 1,750 feet south of the northeast corner of sec. 28, T. 12 N., R. 96 W.

A—0 to 2 inches; very pale brown (10YR 7/3) loamy coarse sand, pale brown (10YR 6/3) moist; weak medium platy structure parting to weak medium granular; soft, very friable, nonsticky and nonplastic; 5 percent fine gravel; mildly alkaline; abrupt smooth boundary.
Bt1—2 to 12 inches; brown (7.5YR 5/4) coarse sandy loam, dark brown (7.5YR 4/4) moist; weak coarse subangular blocky structure parting to weak medium subangular blocky; slightly hard, friable, slightly sticky and slightly plastic; common faint clay films on faces of peds; 5 percent fine gravel; mildly alkaline; clear smooth boundary.
Bt2—12 to 19 inches; light brown (7.5YR 6/4) coarse sandy loam, brown (7.5YR 5/4) moist; weak medium subangular blocky structure; soft, friable, slightly sticky and nonplastic; few faint clay films on faces of peds; 5 percent fine gravel; slightly effervescent; moderately alkaline; clear smooth boundary.
Bk1—19 to 24 inches; light yellowish brown (10YR 6/4) coarse sandy loam, yellowish brown (10YR 5/4) moist; weak medium subangular blocky structure; slightly hard, friable, slightly sticky and nonplastic; 5 percent fine gravel; common concentrations of calcium carbonate; violently effervescent; moderately alkaline; gradual smooth boundary.
Bk2—24 to 48 inches; brownish yellow (10YR 6/6) loamy coarse sand, yellowish brown (10YR 5/6) moist; massive; soft, very friable, nonsticky and nonplastic; 5 percent fine gravel; common concentrations of calcium carbonate; strongly effervescent; moderately alkaline; gradual smooth boundary.
C—48 to 60 inches; yellow (10YR 7/6) coarse sand, brownish yellow (10YR 6/6) moist; single grained; loose, nonsticky and nonplastic; 10 percent fine gravel; strongly effervescent; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 0 to 15 percent fine gravel
Depth to effervescence: 7 to 25 inches
Hue: 7.5YR or 10YR

Bt horizons:
Texture: sandy loam or coarse sandy loam
Reaction: mildly alkaline or moderately alkaline

Bk horizons:
Texture: coarse sandy loam, sandy loam, loamy coarse sand, or loamy sand

Ryan Park Series

Map unit(s): 170, 171, 172
Local phase(s): none specified
Depth class: very deep
Drainage class: somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: alluvial fans, benches, hills
Position on landform: toeslopes
Parent material: alluvium and residuum derived from sandstone, eolian deposits and in alluvium derived from sandstone, residuum derived from sandstone
Elevation: 5,800 to 7,000 feet (1,768 to 2,134 meters)

Slope: 0 to 25 percent
Climatic data:
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Coarse-loamy, mixed Borollic Haplargids

Typical Pedon

Map unit in which located: Ryan Park sandy loam, 0 to 3 percent slopes
Location in the survey area: about 2,300 feet east and 1,800 feet north of the southwest corner of sec. 23, T. 6 N., R. 94 W.

A—0 to 5 inches; yellowish brown (10YR 5/4) sandy loam, dark yellowish brown (10YR 3/3) moist; weak fine granular structure; loose, very friable, nonsticky and nonplastic; mildly alkaline; clear smooth boundary.
Bt1—5 to 13 inches; brown (10YR 5/3) sandy loam, dark brown (10YR 4/3) moist; weak medium subangular blocky structure parting to weak fine granular; slightly hard, very friable, nonsticky and slightly plastic; very few faint clay films on faces of peds; mildly alkaline; clear smooth boundary.
Bt2—13 to 23 inches; yellowish brown (10YR 5/4) sandy loam, dark yellowish brown (10YR 4/4) moist; moderate coarse prismatic structure parting to moderate medium subangular blocky; slightly hard, friable, nonsticky and slightly plastic; few faint clay films on faces of peds; mildly alkaline; clear smooth boundary.
Btk—23 to 30 inches; pale brown (10YR 6/3) sandy loam, brown (10YR 4/3) moist; weak coarse subangular blocky structure parting to weak medium subangular blocky; slightly hard, very friable, nonsticky and slightly plastic; very few faint clay films on faces of peds; few concentrations of calcium carbonate; strongly effervescent; moderately alkaline; gradual wavy boundary.
Bk1—30 to 37 inches; light gray (10YR 7/2) loamy sand, pale brown (10YR 6/3) moist; weak coarse subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; common concentrations of calcium carbonate; moderately alkaline; abrupt wavy boundary.
Bk2—37 to 39 inches; very pale brown (10YR 7/3) loamy sand, yellowish brown (10YR 5/4) moist; massive; slightly hard, very friable, nonsticky and nonplastic; 14 percent gravel; common concentrations of calcium carbonate; strongly effervescent; moderately alkaline; abrupt smooth boundary.
C—39 to 60 inches; very pale brown (10YR 7/4) sand, yellowish brown (10YR 5/4) moist; single grained; loose, nonsticky and nonplastic; mildly alkaline.

Range in Characteristics

Depth to effervescence: 15 to 30 inches

Bt horizons:
Hue: 7.5YR or 10YR

Bk horizons:
Texture: loamy sand or sand
Note: Many pedons have Bk horizons to depths of 60 inches or more.

Ryark Series

Map unit(s): 173, 174
Local phase(s): none specified
Depth class: very deep
Drainage class: somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: benches, hillslopes, concave and planar areas on plateaus
Parent material: eolian deposits and in residuum derived from sandstone, eolian deposits derived from sandstone
Elevation: 6,100 to 6,800 feet (1,859 to 2,073 meters)
Slope: 1 to 15 percent
Climatic data:
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Coarse-loamy, mixed Borollic Haplargids

Typical Pedon

Map unit in which located: Ryark -Maybell complex, 1 to 12 percent slopes
Location in the survey area: about 1,000 feet south and 15 feet west of the northeast corner of sec. 16, T. 10 N., R. 95 W.

A1—0 to 3 inches; very pale brown (10YR 7/3) loamy sand, brown (10YR 5/3) moist; single grained; loose, nonsticky and nonplastic; neutral; abrupt smooth boundary.

A2—3 to 6 inches; very pale brown (10YR 7/3) loamy sand, yellowish brown (10YR 5/4) moist; weak medium platy structure parting to weak medium granular; soft, very friable, nonsticky and nonplastic; mildly alkaline; clear smooth boundary.
Bt1—6 to 12 inches; light brown (7.5YR 6/4) sandy loam, brown (7.5YR 4/4) moist; moderate medium prismatic structure parting to moderate medium subangular blocky; slightly hard, friable, slightly sticky and nonplastic; few faint clay films on faces of peds and bridging sand grains; mildly alkaline; clear wavy boundary.
Bt2—12 to 19 inches; very pale brown (10YR 7/4) sandy loam, yellowish brown (10YR 5/4) moist; weak medium prismatic structure parting to weak medium subangular blocky; soft, very friable, nonsticky and nonplastic; few faint clay films bridging sand grains; mildly alkaline; clear wavy boundary.
BC—19 to 30 inches; very pale brown (10YR 7/4) loamy sand, light yellowish brown (10YR 6/4) moist; massive; soft, very friable, nonsticky and nonplastic; mildly alkaline; diffuse wavy boundary.
C—30 to 60 inches; pale yellow (2.5Y 8/4) sand, pale yellow (2.5Y 7/4) moist; single grained; loose, nonsticky and nonplastic; mildly alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 0 to 5 percent gravel
Depth to argillic horizon: 13 to 30 inches
Depth to secondary calcium carbonate: 40 inches or more

A horizon:
Texture: loamy sand or coarse sand

Bt horizon:
Hue: 10YR or 7.5YR
Texture: sandy loam or coarse sandy loam; in some pedons the upper 2-3 inches are sandy clay loam with 20 to 22 percent clay
Clay content: 14 to 18 percent

C horizon:
Hue: 10YR or 2.5Y
Texture: coarse sand, sand, or loamy sand

Sandwash Series

Map unit(s): 123, 175
Local phase(s): none specified
Depth class: moderately deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: plateaus, planar areas on plateaus
Parent material: loess and residuum derived from limestone, residuum derived from sandstone
Elevation: 6,000 to 7,300 feet (1,829 to 2,225 meters)
Slope: 1 to 10 percent
Climatic data:
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Loamy-skeletal, carbonatic, frigid Typic Calciorthids

Typical Pedon

Map unit in which located: Sandwash-Langspring-Baston complex, 1 to 6 percent slopes
Location in the survey area: about 1,300 feet south and 1,300 feet east of the northwest corner of sec. 33, T. 10 N., R. 98 W.

A—0 to 2 inches; very pale brown (10YR 7/3) loam, brown (10YR 4/3) moist; moderate thin platy structure; slightly hard, friable, slightly sticky and slightly plastic; strongly effervescent; moderately alkaline; abrupt smooth boundary.
Bw—2 to 9 inches; light yellowish brown (10YR 6/4) loam, dark yellowish brown (10YR 4/4) moist; weak medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; strongly effervescent; moderately alkaline; clear smooth boundary.
Bk—9 to 16 inches; very pale brown (10YR 7/4) loam, yellowish brown (10YR 5/4) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; 5 percent gravel; 35 percent calcium carbonate equivalent; calcium carbonate disseminated; violently effervescent; moderately alkaline; abrupt wavy boundary.
2Bk—16 to 22 inches; very pale brown (10YR 7/4) extremely cobbly loam, yellowish brown (10YR 5/4) moist; massive; soft, very friable, slightly sticky and slightly plastic; 70 percent cobbles, 5 percent gravel; 70 percent calcium carbonate equivalent; calcium carbonate disseminated and as many thick pendants on underside of cobbles; violently effervescent; moderately alkaline; abrupt wavy boundary.
R—22 inches; hard fractured limestone.

Range in Characteristics

Particle-size control section:
Clay content: 18 to 30 percent

Rock fragment content: 35 to 60 percent
Calcium carbonate equivalent: 40 to 60 percent
Depth to calcic horizon: 4 to 15 inches
Depth to effervescence: 0 to 5 inches
Depth to lithic contact: 20 to 40 inches

A horizon:
Hue: 2.5Y through 7.5YR
Texture: loam or sandy loam

Bw horizon: (if present)
Hue: 10YR or 7.5YR
Texture: loam or clay loam

Bk horizon:
Hue: 2.5Y through 7.5YR
Texture: loam, clay loam, or channery loam

2Bk horizon:
Hue: 2.5Y through 7.5YR
Texture: very cobbly loam, very channery loam, extremely cobbly loam, extremely cobbly clay loam, or extremely channery loam
Reaction: moderately alkaline or strongly alkaline

Schooner Series

Map unit(s): 176, 177
Local phase(s): none specified
Depth class: shallow
Drainage class: excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Landform: hillslopes, plateaus, ridges
Parent material: residuum derived from sandstone
Elevation: 5,800 to 6,600 feet (1,768 to 2,012 meters)
Slope: 5 to 45 percent
Climatic data:
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Frost-free period: 90 to 105 days

Taxonomic class: Mixed, mesic Lithic Torripsamments

Typical Pedon

Map unit in which located: Schooner-Tricera complex, 5 to 25 percent slopes
Location in the survey area: about 1,800 feet east and 50 feet north of the southwest corner of sec. 29, T. 4 N., R. 103 W.

A—0 to 4 inches; reddish yellow (7.5YR 6/6) loamy sand, strong brown (7.5YR 5/6) moist; weak coarse granular structure; soft, very friable, slightly sticky and nonplastic; mildly alkaline; abrupt smooth boundary.

AC—4 to 9 inches; brown (7.5YR 5/4) loamy fine sand, dark brown (7.5YR 4/4) moist; weak medium subangular blocky structure; soft, very friable, slightly sticky and nonplastic; mildly alkaline; clear smooth boundary.

C—9 to 14 inches; strong brown (7.5YR 5/6) loamy fine sand, strong brown (7.5YR 4/6) moist; weak coarse subangular blocky structure; soft, very friable, slightly sticky and nonplastic; 5 percent gravel; mildly alkaline; abrupt smooth boundary.

R—14 inches; hard sandstone bedrock.

Range in Characteristics

Depth to effervescence: usually noneffervescent throughout, but
Depth to lithic contact: 10 to 20 inches
Hue: 5YR or 7.5YR
Note: This soil is outside the range of the Schooner series in most pedons because this soil typically has hue of 7.5YR in all subhorizons. In some pedons, calcium carbonate may have accumulated within the R horizon.

C horizon:
Texture: loamy sand, loamy fine sand, or channery loamy sand
Rock fragment content: 0 to 20 percent

Schoonover Series

Map unit(s): 246
Local phase(s): none specified
Depth class: shallow
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: mountains
Position on landform: summits, shoulders
Parent material: residuum weathered from limestone
Elevation: 7,000 to 8,500 feet (2,134 to 2,591 meters)
Slope: 3 to 25 percent
Climatic data:
Mean annual precipitation: 14 to 18 inches (356 to 457 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Loamy-skeletal, mixed, superactive, frigid Aridic Lithic Ustochrepts

Typical Pedon

Map unit in which located: Schoonover-Duffymont complex, 3 to 25 percent slopes, rubbly, from the Dinosaur National Monument Soil Survey

Location in the Dinosaur National Monument survey area: about 400 feet east and 2,400 feet north of the southwest corner, section 32, T. 8 N., R. 103 W., NMPM latitude 40 degrees, 36 minutes, 8 seconds N. and longitude 109 degrees, 0 minutes, 14 seconds W.

The soil surface is covered with limestone rock fragments, consisting of 30 percent gravel and 20 percent channers.

A—0 to 3 inches; brown (7.5YR 4/4) very gravelly loam, brown (7.5YR 4/3) moist; weak medium and coarse subangular blocky structure parting to weak medium granular; soft, very friable, slightly sticky and slightly plastic; common fine roots; few fine vesicular and tubular pores; 20 percent gravel, 12 percent channers and 5 percent stones; strongly effervescent; moderately alkaline; clear wavy boundary.

Bk1—3 to 8 inches; brown (7.5YR 5/4) very gravelly loam, brown (7.5YR 4/4) moist; weak fine subangular blocky structure parting to weak medium granular; soft, very friable, slightly sticky and slightly plastic; common very fine roots; few fine vesicular and tubular pores; 20 percent gravel, 12 percent channers, and 5 percent stones; calcium carbonate is disseminated and in few rounded soft masses; violently effervescent; 15 percent calcium carbonate equivalent; moderately alkaline; abrupt wavy boundary.

Bk2—8 to 11 inches; light brown (7.5YR 6/4) very gravelly loam, brown (7.5YR 4/4) moist; weak fine and medium subangular blocky structure; slightly hard, friable, sticky and plastic; few fine roots; few fine vesicular and tubular pores; 25 percent gravel, 10 percent channers, and 5 percent stones; common distinct calcium carbonate coatings on rock fragments and common rounded soft masses of calcium carbonate throughout; violently effervescent; 25 percent calcium carbonate equivalent; strongly alkaline; abrupt irregular boundary.

R—11 inches; hard limestone.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 18 to 27 percent
Rock fragment content: 35 to 75 percent
Calcium carbonate equivalent: 15 to 40 percent
Depth to bedrock: 10 to 20 inches

A horizon:
Hue: 7.5YR or 10YR
Value: 4 to 6 dry, 3 to 5 moist
Chroma: 2 to 4
Reaction: slightly alkaline or moderately alkaline

Bk horizon:
Hue: 7.5YR or 10YR
Value: 4 to 7 dry, 3 to 5 moist
Chroma: 2 to 4
Texture: very gravelly loam, extremely channery loam, or extremely flaggy loam
Reaction: moderately alkaline or strongly alkaline

Sheppard Series

Map unit(s): 210
Local phase(s): cool
Depth class: very deep
Drainage class: excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: alluvial fans
Parent material: alluvium derived from sandstone and quartzite
Elevation: 5,300 to 6,000 feet (1,615 to 1,829 meters)
Slope: 1 to 12 percent
Climatic data:
Mean annual precipitation: 7 to 10 inches (178 to 254 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Frost-free period: 90 to 105 days

Taxonomic class: Mixed, mesic Typic Torripsamments

Typical Pedon

Map unit in which located: Willwood-Sheppard, cool, complex, 1 to 12 percent slopes
Location in the survey area: about 1,950 feet north and 1,625 feet west of the southeast corner of sec. 4, T. 10 N., R. 103 W.

A—0 to 4 inches; brown (7.5YR 5/4) loamy fine sand, dark brown (7.5YR 4/4) moist; weak medium granular structure; soft, very friable, nonsticky and nonplastic; slightly effervescent; moderately alkaline; abrupt smooth boundary.

CA—4 to 12 inches; brown (7.5YR 5/4) loamy fine sand, dark brown (7.5YR 4/4) moist; weak thick platy structure parting to weak medium platy; soft, very friable, nonsticky and nonplastic; strongly effervescent; moderately alkaline; clear smooth boundary.

C1—12 to 21 inches; light brown (7.5YR 6/4) loamy fine sand, brown (7.5YR 4/4) moist; weak thick platy structure; soft, very friable, nonsticky and

nonplastic; strongly effervescent; moderately alkaline; clear smooth boundary.
C2—21 to 60 inches; light brown (7.5YR 6/4) loamy fine sand, brown (7.5YR 4/4) moist; single grained; loose, nonsticky and nonplastic; 10 percent gravel; strongly effervescent; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 0 to 10 percent

C horizons:
Hue: 7.5YR or 5YR
Texture: sand, loamy fine sand, or loamy sand

Simanni Series

Map unit(s): 178
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: hills
Position on landform: toeslopes
Parent material: alluvium derived from sandstone
Elevation: 6,000 to 6,500 feet (1,829 to 1,981 meters)
Slope: 1 to 10 percent
Climatic data:
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine-loamy, mixed, frigid Typic Haplargids

Typical Pedon

Map unit in which located: Simanni-Ruedloff complex, 1 to 10 percent slopes
Location in the survey area: about 2,600 feet east and 1,300 feet south of the northwest corner of sec. 28, T. 12 N., R. 96 W.

A1—0 to 2 inches; pale brown (10YR 6/3) coarse sandy loam, brown (10YR 4/3) moist; weak fine granular structure; soft, very friable, slightly sticky and nonplastic; 5 percent gravel; mildly alkaline; abrupt smooth boundary.
A2—2 to 6 inches; light yellowish brown (10YR 6/4) coarse sandy loam, yellowish brown (10YR 5/4) moist; weak medium subangular blocky structure; soft, very friable, slightly sticky and nonplastic; 5 percent gravel; mildly alkaline; clear smooth boundary.
AB—6 to 10 inches; light yellowish brown (10YR 6/4) coarse sandy loam; yellowish brown (10YR 5/4) moist; moderate coarse subangular blocky structure parting to weak fine subangular blocky; slightly hard, friable, slightly sticky and nonplastic; 5 percent gravel; moderately alkaline; clear smooth boundary.
Bt—10 to 22 inches; light yellowish brown (10YR 6/4) sandy clay loam; yellowish brown (10YR 5/4) moist; moderate coarse subangular blocky structure parting to weak fine subangular blocky; hard, friable, sticky and slightly plastic; common distinct clay films on faces of peds; 5 percent gravel; strongly effervescent; moderately alkaline; clear smooth boundary.
Bk1—22 to 33 inches; reddish yellow (7.5YR 6/6) coarse sandy loam, strong brown (7.5YR 5/6) moist; weak coarse subangular blocky structure; slightly hard, friable; slightly sticky and nonplastic; 5 percent gravel; violently effervescent; strongly alkaline; gradual smooth boundary.
Bk2—33 to 60 inches; reddish yellow (7.5YR 6/6) loamy coarse sand, strong brown (7.5YR 5/6) moist; massive; slightly hard, friable, slightly sticky and nonplastic; 5 percent gravel; violently effervescent; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 18 to 25 percent
Depth to argillic horizon: 15 to 25 inches
Depth to effervescence: 5 to 20 inches

Bt horizon:
Hue: 10YR or 7.5YR
Texture: sandy clay loam or coarse sandy loam
Rock fragment content: 0 to 10 percent
Reaction: mildly alkaline or moderately alkaline

Bk horizons:
Hue: 10YR or 7.5YR
Texture: coarse sandy loam, loamy coarse sand, or coarse sand
Rock fragment content: 0 to 10 percent
Reaction: moderately alkaline or strongly alkaline

Skyway Series

Map unit(s): 74, 179
Local phase(s): moist, dry
Depth class: moderately deep
Drainage class: well drained

Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: mountainsides, mountain plateaus
Parent material: residuum and colluvium derived from sandstone, residuum derived from sandstone
Elevation: 7,000 to 8,500 feet (2,134 to 2,591 meters)
Slope: 3 to 75 percent
Climatic data:
Mean annual precipitation: 18 to 22 inches (457 to 559 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Frost-free period: 50 to 75 days

Taxonomic class: Coarse-loamy, mixed Pachic Cryoborolls

Typical Pedon

Map unit in which located: Skyway fine sandy loam, dry, 15 to 75 percent slopes
Location in the survey area: about 1,000 feet north and 500 feet east of the southwest corner of sec. 19, T. 4 N., R. 94 W.

A1—0 to 5 inches; grayish brown (10YR 5/2) fine sandy loam, very dark brown (10YR 2/2) moist; weak medium granular structure; soft, very friable, nonsticky and nonplastic; neutral; clear wavy boundary.
A2—5 to 12 inches; grayish brown (10YR 5/2) fine sandy loam, very dark grayish brown (10YR 3/2) moist; moderate medium granular structure; soft, very friable, slightly sticky and slightly plastic; neutral; clear wavy boundary.
A3—12 to 20 inches; brown (10YR 5/3) fine sandy loam, dark brown (10YR 3/3) moist; weak medium subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; neutral; gradual wavy boundary.
AC—20 to 26 inches; very pale brown (10YR 7/3) fine sandy loam, brown (10YR 4/3) moist; weak medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; neutral; clear wavy boundary.
C—26 to 31 inches; very pale brown (10YR 7/3) gravelly sandy loam, brown (10YR 5/3) moist; massive; soft, very friable, slightly sticky and slightly plastic; 20 percent gravel, 10 percent cobbles; neutral; abrupt wavy boundary.
R—31 inches; hard sandstone bedrock.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 5 to 20 percent
Depth to lithic contact: 20 to 40 inches
C horizon:
Texture: fine sandy loam, sandy loam, or gravelly sandy loam
Rock fragment content: 10 to 35 percent

Solirec Series

Map unit(s): 225, 239, 267
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: fan remnants, hillslopes, mesas
Position on landform: backslopes, footslopes, toeslopes
Parent material: eolian deposits over alluvium and/or colluvium derived from limestone and sandstone, eolian deposits over alluvium and/or colluvium derived from sandstone and shale, eolian deposits over slope alluvium derived from sandstone and shale
Elevation: 5,300 to 6,600 feet (1,615 to 2,012 meters)
Slope: 3 to 40 percent
Climatic data:
Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Frost-free period: 90 to 140 days

Taxonomic class: Fine-loamy, mixed, superactive, mesic Ustic Calciargids

Typical Pedon

Map unit in which located: Abracon-Solirec complex, 3 to 8 percent slopes, from the Dinosaur National Monument Soil Survey
Location in the Dinosaur National Monument survey area: about 1,600 feet west and 1,500 feet south of the northeast corner of section 25, T. 3 S., R. 24 E., SLBM latitude 40 degrees, 31 minutes, 59 seconds N. and longitude 109 degrees, 10 minutes, 9 seconds W.

A—0 to 4 inches; brown (7.5YR 5/4) fine sandy loam, dark brown (7.5YR 4/3) moist; moderate thin platy structure parting to weak very fine and fine subangular blocky; soft, friable, slightly sticky and slightly plastic; many very fine, few fine, medium, and coarse roots; many very fine, few fine tubular pores; slightly alkaline; clear smooth boundary.
Bt-4 to 12 inches; brown (7.5YR 5/4) sandy clay loam, brown (7.5YR 4/4) moist; moderate coarse prismatic structure parting to moderate medium and fine subangular blocky; hard, friable, slightly sticky and slightly plastic; common very fine, few

fine medium, and coarse roots; many very fine, few fine, and medium tubular pores; common distinct clay films on faces of peds; slightly alkaline; abrupt smooth boundary.

Bk1—12 to 19 inches; light brown (7.5YR 6/4) loam, brown (7.5YR 5/4) moist; moderate medium subangular blocky structure parting to moderate very fine and fine subangular blocky; hard, firm, sticky and plastic; common very fine, few fine and medium roots; many very fine, few fine tubular pores; strongly effervescent; 15 percent calcium carbonate equivalent; calcium carbonate is disseminated and in common fine irregular soft masses; moderately alkaline; clear wavy boundary.

Bk2—19 to 37 inches; pink (7.5YR 7/4) clay loam, brown (7.5YR 5/4) moist, moderate fine and medium subangular blocky structure; very hard, firm, sticky and plastic; few very fine and fine roots; common very fine, few fine tubular pores; 5 percent gravel; strongly effervescent; 16 percent calcium carbonate equivalent; calcium carbonate is disseminated and in common medium irregular soft masses; moderately alkaline; clear wavy boundary.

Bk3—37 to 53 inches; pink (7.5YR 8/3) clay loam, pink (7.5YR 8/4) moist; weak fine and medium subangular blocky structure; very hard, firm, sticky and plastic; few very fine and fine roots; common very fine, few fine tubular pores; 5 percent gravel; violently effervescent; 32 percent calcium carbonate equivalent; calcium carbonate is disseminated and in many extremely coarse irregular soft masses; moderately alkaline; clear wavy boundary.

Bk4—53 to 75 inches; pink (7.5YR 7/4) clay loam, light brown (7.5YR 6/4) moist; weak fine and medium subangular blocky structure; hard, firm, sticky and plastic; few very fine roots; common very fine, few fine tubular pores; 5 percent gravel; strongly effervescent; 21 percent calcium carbonate equivalent; calcium carbonate is disseminated and in common fine irregular soft masses; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
- *Clay content:* 18 to 35 percent
- *Rock fragment content:* 0 to 15 percent

Depth to calcic horizon: 10 to 20 inches

A horizon:
- *Hue:* 7.5YR or 10YR
- *Value:* 5 or 6 dry, 3 or 4 moist
- *Chroma:* 3 or 4
- *Texture:* loam or fine sandy loam
- *Reaction:* slightly alkaline or moderately alkaline

Bt horizon:
- *Hue:* 5YR or 7.5YR
- *Value:* 5 or 6 dry, 4 or 5 moist
- *Chroma:* 4 to 6
- *Texture:* loam or sandy clay loam
- *Reaction:* slightly alkaline or moderately alkaline

Bk horizon:
- *Hue:* 5YR or 7.5YR
- *Value:* 5 to 8 dry, 4 to 6 moist
- *Chroma:* 2 to 6
- *Texture:* loam, sandy clay loam, or clay loam
- *Calcium carbonate equivalent:* 15 to 40 percent
- *Reaction:* moderately alkaline or strongly alkaline

C horizon: (if present)
- *Hue:* 5YR or 7.5YR
- *Value:* 5 to 7 dry, 4 to 6 moist
- *Chroma:* 4
- *Texture:* fine sandy loam, sandy loam, or loam
- *Reaction:* moderately alkaline or strongly alkaline

Splitro Series

Map unit(s): 213, 214
Local phase(s): none specified
Depth class: shallow
Drainage class: well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: mountainsides, plateaus
Parent material: residuum derived from sandstone
Elevation: 7,000 to 8,500 feet (2,134 to 2,591 meters)
Slope: 3 to 65 percent
Climatic data:
- *Mean annual precipitation:* 18 to 20 inches (457 to 508 millimeters)
- *Mean annual air temperature:* 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
- *Frost-free period:* 50 to 75 days

Taxonomic class: Loamy, mixed Lithic Cryoborolls

Typical Pedon

Map unit in which located: Winevada-Splitro complex, 3 to 25 percent slopes
Location in the survey area: about 200 feet east and 1,500 feet south of the northeast corner of sec. 12, T. 4 N., R. 91 W.

Oi—0 to 1 inch; slightly decomposed leaves and twigs.

A1—1 inch to 5 inches; brown (10YR 5/3) fine sandy

loam, very dark grayish brown (10YR 3/2) moist; weak fine and medium granular structure; soft, very friable, slightly sticky and slightly plastic; 5 percent soft sandstone fragments; neutral; clear smooth boundary.
A2—5 to 12 inches; brown (10YR 5/3) fine sandy loam, very dark grayish brown (10YR 3/2) moist; weak fine and medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; 5 percent soft sandstone fragments; neutral; clear smooth boundary.
AC—12 to 14 inches; pale brown (10YR 6/3) fine sandy loam, dark brown (10YR 4/3) moist; weak medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; 40 percent soft sandstone fragments; neutral; abrupt wavy boundary.
R—14 inches; hard sandstone bedrock.

Range in Characteristics

Depth to lithic contact: 10 to 20 inches
Thickness of the mollic epipedon: 10 to 15 inches

AC horizon:
Texture: gravelly fine sandy loam or fine sandy loam

Spool Series

Map unit(s): 180
Local phase(s): none specified
Depth class: shallow
Drainage class: excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: hills, ridges
Position on landform: backslopes
Parent material: residuum derived from sandstone
Elevation: 6,600 to 7,300 feet (2,012 to 2,225 meters)
Slope: 5 to 40 percent
Climatic data:
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Mixed, frigid Lithic Torripsamments

Typical Pedon

Map unit in which located: Spool-Maybell complex, 5 to 40 percent slopes
Location in the survey area: about 1,600 feet north and 1,400 feet east of the southwest corner of sec. 31, T. 5 N., R. 100 W.

A—0 to 4 inches; yellowish brown (10YR 5/4) loamy fine sand, dark yellowish brown (10YR 3/4) moist; weak medium granular structure; soft, very friable, nonsticky and nonplastic; 5 percent gravel; neutral; clear smooth boundary.
C—4 to 12 inches; yellowish brown (10YR 5/4) loamy fine sand, dark yellowish brown (10YR 4/4) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; 5 percent gravel; neutral; abrupt wavy boundary.
R—12 inches; hard sandstone bedrock.

Range in Characteristics

Depth to lithic contact: 10 to 20 inches

C horizon:
Texture: loamy fine sand or channery loamy fine sand
Rock fragment content: 0 to 25 percent

Stout Series

Map unit(s): 247
Local phase(s): none specified
Depth class: very shallow to shallow
Drainage class: somewhat excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: mountains
Position on landform: backslopes, footslopes
Parent material: residuum weathered from sandstone
Elevation: 6,800 to 7,800 feet (2,073 to 2,377 meters)
Slope: 5 to 35 percent
Climatic data:
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Loamy, mixed, superactive, nonacid, frigid Lithic Ustorthents

Typical Pedon

Map unit in which located: Stout-Rock outcrop complex, 5 to 35 percent slopes, very stony, from the Dinosaur National Monument Soil Survey

Location in the Dinosaur National Monument survey area: about 1,700 feet east and 1,300 feet south of the northwest corner of section 20, T. 8 N., R. 102 W., NMPM latitude 40 degrees, 38 minutes, 5 seconds N. and longitude 108 degrees, 53 minutes, 11 seconds W.

The soil surface is covered with sandstone rock fragments, consisting of 20 percent gravel, 10 percent cobbles, and 2 percent stones.

A—0 to 2 inches; reddish brown (5YR 4/3) sandy loam, dark reddish brown (5YR 3/3) moist; moderate thick platy structure parting to moderate fine granular; soft, very friable, nonsticky and slightly plastic; common very fine and fine roots; few very fine vesicular pores; 5 percent gravel; neutral; abrupt smooth boundary.

AC—2 to 11 inches; dark reddish brown (5YR 3/3) sandy loam, dark reddish brown (5YR 3/3) moist; massive; soft, very friable, nonsticky and slightly plastic; few very fine roots; few very fine tubular pores; neutral; abrupt smooth boundary.

R—11 inches; hard sandstone.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 5 to 15 percent
Rock fragment content: 5 to 15 percent
Depth to bedrock: 7 to 20 inches
Note: Dark colors are lithochromic in origin.

A horizon:
Value: 3 or 4 moist
Chroma: 3 or 4 dry

C horizon: (if present)
Value: 4 dry or moist
Chroma: 4 dry, 3 moist
Note: Mollic colors in these soils are lithochromic.

Strell Series

Map unit(s): 232
Local phase(s): none specified
Depth class: very shallow to shallow
Drainage class: somewhat excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Landform: cuestas, mesas
Position on landform: footslopes, toeslopes
Parent material: slope alluvium and/or colluvium derived from sandstone
Elevation: 6,200 to 7,000 feet (1,890 to 2,134 meters)
Slope: 5 to 30 percent
Climatic data:
Mean annual precipitation: 12 to 14 inches (305 to 356 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Frigid, coated Lithic Quartzipsamments

Typical Pedon

Map unit in which located: Rock outcrop-Strell-Moonshine association, 4 to 40 percent slopes, from the Dinosaur National Monument Soil Survey
Location in the Dinosaur National Monument survey area: about 2,400 feet north and 200 feet west of the southeast corner, section 4, T. 3 S., R. 21 E., SLBM latitude 40 degrees, 35 minutes, 10 seconds N. and longitude 109 degrees, 33 minutes, 26 seconds W.

A—0 to 3 inches; brown (7.5YR 5/4) sand, dark brown (10YR 3/3) moist; weak thin platy structure parting to moderate very fine granular; loose, nonsticky and nonplastic; common medium, coarse, fine, and very fine roots; many fine interstitial pores; slightly alkaline; clear smooth boundary.

C1—3 to 13 inches; brown (7.5YR 5/4) sand, brown (7.5YR 4/3) moist; massive; soft, loose, nonsticky and nonplastic; common medium and fine and many very fine roots; many fine interstitial pores; slightly alkaline; abrupt smooth boundary.

C2—13 to 14 inches; brown (7.5YR 5/4) sand, dark brown (7.5YR 3/2) moist; massive; soft, very friable, nonsticky and nonplastic; common medium and fine and many very fine roots; many fine interstitial pores; slightly alkaline; abrupt smooth boundary.

R—14 to 18 inches; hard sandstone bedrock.

Range in Characteristics

Depth to bedrock: 5 to 20 inches
Note: The Strell soil in map unit #27, Lakebench-Strell complex, 5 to 30 percent slopes, and map unit #30, Lodore-Mantlemine-Strell complex, 3 to 15 percent slopes, very stony are outside the range of the Strell series because the Strell components are calcareous.

A horizon:
Hue: 7.5YR or 10YR
Value: 4 to 7 dry, 3 to 5 moist

Chroma: 2 to 4
Texture: sand or loamy fine sand
Reaction: neutral or slightly alkaline

C horizon:
Hue: 7.5YR or 10YR
Value: 5 to 7 dry, 3 to 6 moist
Chroma: 2 to 6
Texture: fine sand, loamy fine sand, sand, coarse sand, or loamy sand
Reaction: neutral to moderately alkaline

Strych Series

Map unit(s): 239, 240, 248
Local phase(s): none specified
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: fan remnants, hillslopes, structural benches
Position on landform: backslopes, footslopes
Parent material: alluvium and/or colluvium derived from limestone and sandstone
Elevation: 5,000 to 6,500 feet (1,524 to 1,981 meters)
Slope: 3 to 65 percent
Climatic data:
Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Frost-free period: 90 to 140 days

Taxonomic class: Loamy-skeletal, mixed, superactive, mesic Ustic Haplocalcids

Typical Pedon

Map unit in which located: Milok-Solirec-Strych complex, 10 to 65 percent slopes, very stony, from the Dinosaur National Monument Soil Survey
Location in the Dinosaur National Monument survey area: about 50 feet west and 2,000 feet south of the northeast corner, section 21, T. 6 N., R. 102 W., NMPM latitude 40 degrees, 27 minutes, 33 seconds N. and longitude 108 degrees, 51 minutes, 12 seconds W.

The soil surface is covered with limestone and sandstone rock fragments, consisting of 2 percent stones.

A—0 to 5 inches; reddish brown (5YR 4/3) cobbly loam, dark reddish brown (5YR 3/3) moist; weak medium granular structure; soft, very friable, slightly sticky and slightly plastic; many fine and medium roots; common fine vesicular and tubular pores; 10 percent gravel, 15 percent cobbles, and 5 percent stones; calcium carbonate is disseminated; strongly effervescent; 14 percent calcium carbonate equivalent; slightly alkaline; clear wavy boundary.

Bk1—5 to 10 inches; reddish brown (5YR 5/4) cobbly loam, reddish brown (5YR 4/4) moist; weak fine subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; many fine and medium roots; common fine vesicular and tubular pores; 10 percent gravel, 15 percent cobbles, and 5 percent stones; common fine irregular calcium carbonate concretions; strongly effervescent; 28 percent calcium carbonate equivalent; slightly alkaline; gradual wavy boundary.

Bk2—10 to 34 inches; light reddish brown (5YR 6/3) very stony loam, reddish brown (5YR 4/4) moist; weak fine subangular blocky structure parting to weak fine granular; soft, very friable, slightly sticky and slightly plastic; few fine roots; few fine vesicular and tubular pores; 20 percent gravel, 20 percent cobbles, and 15 percent stones; calcium carbonate coatings on rock fragments and in many medium and coarse threads; violently effervescent; 34 percent calcium carbonate equivalent; moderately alkaline; gradual wavy boundary.

BCk—34 to 50 inches; reddish yellowish (5YR 6/6) very cobbly loam, yellowish red (5YR 5/6) moist; weak medium granular structure; soft, very friable, slightly sticky and slightly plastic; few fine roots; few fine vesicular and tubular pores; 10 percent gravel, 17 percent cobbles, and 10 percent stones; calcium carbonate coatings on rock fragments and in many medium and coarse threads; violently effervescent; 42 percent calcium carbonate equivalent; moderately alkaline; abrupt wavy boundary.

2C—50 to 60 inches; dark reddish brown (2.5YR 3/4) loam, dark reddish brown (2.5YR 3/4) moist; weak fine subangular blocky structure; soft, very friable, sticky and plastic; few fine roots; few fine vesicular and tubular pores; 10 percent gravel; calcium carbonate is disseminated; strongly effervescent; 11 percent calcium carbonate equivalent; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 8 to 18 percent

Rock fragment content: 35 to 65 percent
Calcium carbonate equivalent: 15 to 40 percent
Depth to calcic horizon: 4 to 10 inches

A horizon:
Hue: 5YR or 7.5YR
Value: 4 or 5 dry, 3 or 4 moist
Chroma: 3 to 6
Texture: very cobbly fine sandy loam or cobbly loam
Reaction: slightly alkaline or moderately alkaline
Note: Mollic horizons are less than 7 inches thick.

Bk horizon:
Hue: 5YR or 7.5YR
Value: 6 to 8 dry, 4 to 7 moist
Chroma: 2 to 6
Texture: sandy loam or loam modified by 35 to 65 percent gravel, cobbles, or stones
Reaction: slightly alkaline to strongly alkaline

2C or C horizons: (if present)
Hue: 2.5YR to 7.5YR
Value: 4 to 6 dry, 3 to 5 moist
Chroma: 4 to 6
Texture: loamy fine sand, fine sandy loam, loamy sand, or loam modified by 0 to 80 percent gravel, cobbles, or stones
Reaction: slightly alkaline to strongly alkaline

Stunner Series

Map unit(s): 181, 182
Local phase(s): moist
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: pediments, plateaus
Parent material: alluvium derived from limestone and sandstone, and in loess, eolian deposits
Elevation: 6,500 to 7,800 feet (1,981 to 2,377 meters)
Slope: 1 to 12 percent
Climatic data:
Mean annual precipitation: 11 to 15 inches (279 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine-loamy, mixed Borollic Haplargids

Typical Pedon

Map unit in which located: Stunner, moist-Emlin complex, 1 to 12 percent slopes
Location in the survey area: about 2,500 feet north and 500 feet east of the southwest corner of sec. 6, T. 5 N., R. 100 W.

A—0 to 5 inches; dark grayish brown (10YR 4/2) loam, very dark grayish brown (10YR 3/2) moist; weak fine granular structure; soft, very friable, slightly sticky and slightly plastic; 5 percent gravel; slightly effervescent; moderately alkaline; clear smooth boundary.
Bt—5 to 12 inches; brown (7.5YR 5/4) clay loam, dark brown (7.5YR 4/4) moist; weak medium subangular blocky structure parting to moderate fine subangular blocky; hard, very friable, slightly sticky and plastic; few faint clay films on faces of peds; 5 percent gravel; strongly effervescent; moderately alkaline; gradual smooth boundary.
Btk—12 to 17 inches; light brown (7.5YR 6/4) clay loam, brown (7.5YR 5/4) moist; weak medium subangular blocky structure; very hard, very friable, slightly sticky and plastic; very few faint clay films on faces of peds; 5 percent gravel; 8 percent calcium carbonate equivalent; violently effervescent; moderately alkaline; gradual smooth boundary.
Bk1—17 to 25 inches; pink (7.5YR 7/4) loam, light brown (7.5YR 6/4) moist; weak medium subangular blocky structure; very hard, friable, slightly sticky and slightly plastic; 5 percent gravel; 40 percent calcium carbonate equivalent; violently effervescent; moderately alkaline; gradual smooth boundary.
Bk2—25 to 42 inches; pink (7.5YR 8/4) loam, pink (7.5YR 7/4) moist; massive; very hard, friable, slightly sticky and slightly plastic; 5 percent gravel; 35 percent calcium carbonate equivalent; violently effervescent; strongly alkaline; gradual smooth boundary.
C—42 to 60 inches; pink (7.5YR 7/4) sandy loam, light brown (7.5YR 6/4) moist; massive; slightly hard, friable, slightly sticky and nonplastic; 5 percent gravel; 20 percent calcium carbonate equivalent; violently effervescent; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 18 to 27 percent
Rock fragment content: 0 to 15 percent
Calcium carbonate equivalent: 30 to 40 percent
Depth to argillic horizon: 15 to 25 inches
Depth to calcic horizon: 12 to 20 inches
Depth to effervescence: 20 to 30 inches

Note: The soil in the map unit of Stunner sandy loam, 1 to 8 percent slopes, is outside the range of the Stunner series because it has more than 35 percent fine or coarser sand in the Bt and Bk horizons and has less than 18 percent clay in the Bt3 and Bk horizons.

Bt and Bk horizons:
Hue: 10YR or 7.5YR
Texture: sandy clay loam (Bt1 and Bt2 horizons); sandy loam ranging to a sandy clay loam (Bt3 horizon); loamy sand, sandy loam, gravelly loamy sand, or gravelly sandy loam (Bk horizons)
Rock fragment content: 0 to 35 percent in the Bk horizon

C horizon:
Hue: 10YR or 7.5YR

Styers Series

Map unit(s): 183, 184
Depth class: moderately deep
Drainage class: well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Landform: hills
Position on landform: summits, backslopes, footslopes
Parent material: residuum derived from shale
Elevation: 6,200 to 7,300 feet (1,890 to 2,225 meters)
Slope: 10 to 25 percent
Climatic data:
Mean annual precipitation: 11 to 15 inches (279 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine, montmorillonitic, frigid Udorthentic Chromusterts

Typical Pedon

Map unit in which located: Styers-Ironsprings-Maysprings complex, 10 to 20 percent slopes
Location in the survey area:
about 300 feet east and 800 feet north of the southwest corner of sec. 18, T. 9 N., R. 92 W.

A—0 to 1 inch; light brown (7.5YR 6/4) clay, dark brown (7.5YR 4/4) moist; moderate medium platy structure parting to moderate very fine subangular blocky; hard, firm, very sticky and very plastic; mildly alkaline; abrupt smooth boundary.

Bw1—1 inch to 6 inches; brown (7.5YR 5/4) clay, reddish brown (5YR 4/3) moist; strong medium subangular blocky structure parting to strong fine subangular blocky; extremely hard, very firm, very sticky and very plastic; mildly alkaline; clear smooth boundary.

Bw2—6 to 18 inches; light reddish brown (5YR 6/3) clay, reddish brown (5YR 5/3) moist; strong coarse angular blocky structure parting to strong medium angular blocky; extremely hard, very firm, very sticky and very plastic; common slickensides; strongly effervescent; moderately alkaline; gradual smooth boundary.

Bk—18 to 26 inches; variegated 90 percent weak red (10R 4/3) and 10 percent strong brown (7.5YR 5/6) clay, dusky red (10R 3/3) and strong brown (7.5YR 4/6) moist; strong coarse angular blocky structure; extremely hard, very firm, very sticky and very plastic; common slickensides; common fine filaments of calcium carbonate; strongly effervescent; moderately alkaline; gradual smooth boundary.

BCk—26 to 35 inches; variegated 70 percent weak red (10R 4/3) and 30 percent strong brown (7.5YR 5/6) clay, dusky red (10R 3/3) and strong brown (7.5YR 4/6) moist; weak coarse subangular blocky structure; extremely hard, very firm, very sticky and very plastic; 30 percent soft shale fragments; common fine filaments of calcium carbonate; strongly effervescent; moderately alkaline; gradual smooth boundary.

Cr—35 inches; variegated weak red and strong brown weakly consolidated shale bedrock.

Range in Characteristics

Depth to effervescence: 5 to 20 inches
Depth to paralithic contact: 20 to 40 inches
Note: When the soil dries, cracks develop to a depth of 20 to 30 inches and are 1/2 to 3/4 inch wide

A horizon:
Hue: 7.5YR or 10YR
Texture: clay or silty clay loam
Reaction: mildly alkaline or moderately alkaline

Bw horizon:
Hue: 5YR or 7.5YR
Reaction: mildly alkaline or moderately alkaline

Bk horizon:
Hue: variegated hues of 10R, 2.5YR, 5YR, 7.5YR, 10YR, and 2.5Y (7.5YR or redder are dominant)

Taffom Series

Map unit(s): 15, 87, 164, 184, 185
Local phase(s): none specified
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: hills, hillslopes, plateaus, concave positions on plateaus
Position on landform: footslopes
Parent material: colluvium and residuum derived from sandstone, eolian deposits and residuum derived from sandstone
Elevation: 6,200 to 7,300 feet (1,890 to 2,225 meters)
Slope: 3 to 30 percent
Climatic data:
Mean annual precipitation: 11 to 15 inches (279 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine-loamy, mixed Borollic Haplargids

Typical Pedon

Map unit in which located: Taffom sandy loam, 3 to 15 percent slopes
Location in the survey area: about 2,500 feet east and 1,600 feet south of the northwest corner of sec. 11, T. 10 N., R. 93 W.

A1—0 to 4 inches; light brownish gray (10YR 6/2) sandy loam, very dark grayish brown (10YR 3/2) moist; moderate medium granular structure; soft, very friable, slightly sticky and nonplastic; neutral; clear smooth boundary.
A2—4 to 6 inches; brown (10YR 5/3) sandy loam, dark brown (10YR 3/3) moist; weak coarse subangular blocky structure; soft, very friable, slightly sticky and nonplastic; mildly alkaline; abrupt smooth boundary.
Bt1—6 to 12 inches; yellowish brown (10YR 5/4) sandy clay loam, dark yellowish brown (10YR 4/4) moist; moderate medium prismatic structure parting to moderate coarse subangular blocky; hard, friable, sticky and slightly plastic; common distinct clay films on faces of peds; mildly alkaline; clear smooth boundary.
Bt2—12 to 43 inches; light yellowish brown (10YR 6/4) sandy clay loam, yellowish brown (10YR 5/4) moist; moderate coarse prismatic structure parting to moderate coarse subangular blocky; hard, friable, sticky and plastic; few distinct clay films on faces of peds; mildly alkaline; gradual wavy boundary.
BC—43 to 53 inches; light yellowish brown (10YR 6/4) loam, yellowish brown (10YR 5/4) moist; weak coarse subangular blocky structure; hard, friable, sticky and plastic; mildly alkaline; clear wavy boundary.
BCk—53 to 60 inches; pale yellow (2.5Y 7/3) loam, light yellowish brown (2.5Y 6/4) moist; massive; hard, friable, sticky and plastic; strongly effervescent; moderately alkaline.

Range in Characteristics

Depth to argillic horizon 30 to 45 inches
Depth to secondary lime: 40 inches or more

A horizons:
Texture: coarse sandy loam or sandy loam

Bt horizons:
Hue: 10YR or 7.5YR
Reaction: neutral or mildly alkaline

BC and Bk horizons:
Hue: 10YR or 2.5Y
Texture: coarse sand, loamy sand, sandy loam, or loam
Reaction: mildly alkaline or moderately alkaline

Talamantes Series

Map unit(s): 186, 187, 188
Local phase(s): saline
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: alluvial fans, hills
Position on landform: footslopes, toeslopes
Parent material: alluvium derived from sedimentary rocks
Elevation: 6,000 to 7,200 feet (1,829 to 2,195 meters)
Slope: 0 to 15 percent
Climatic data:
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine-loamy, mixed (calcareous), frigid Typic Torriorthents

Typical Pedon

Map unit in which located: Talamantes loam, 0 to 6 percent slopes
Location in the survey area: about 350 feet north and 300 feet east of the southwest corner of sec. 26, T. 9 N., R. 99 W.

A1—0 to 1 inch; pale brown (10YR 6/3) loam, brown (10YR 5/3) moist; moderate medium platy structure; soft, very friable, slightly sticky and slightly plastic; violently effervescent; moderately alkaline; abrupt smooth boundary.
A2—1 inch to 3 inches; grayish brown (10YR 5/2) loam, dark grayish brown (10YR 4/2) moist; weak medium platy structure; soft, very friable, slightly sticky and slightly plastic; violently effervescent; moderately alkaline; clear smooth boundary.
AC—3 to 13 inches; brown (10YR 5/3) loam, brown (10YR 4/3) moist; weak medium subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; violently effervescent; strongly alkaline; clear smooth boundary.
C1—13 to 23 inches; pale brown (10YR 6/3) loam, yellowish brown (10YR 5/4) moist; weak coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; violently effervescent; moderately alkaline; clear smooth boundary.
C2—23 to 26 inches; light gray (10YR 7/2) fine sandy loam, pale brown (10YR 6/3) moist; massive; slightly hard, very friable, nonsticky and nonplastic; violently effervescent; moderately alkaline; clear smooth boundary.
C3—26 to 48 inches; light gray (10YR 7/2) loam, pale brown (10YR 6/3) moist; massive; hard, friable, slightly sticky and slightly plastic; violently effervescent; moderately alkaline; clear smooth boundary.
C4—48 to 60 inches; light gray (10YR 7/2) sandy loam, pale brown (10YR 6/3) moist; massive; slightly hard, very friable, nonsticky and nonplastic; violently effervescent; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 18 to 35 percent
Rock fragment content: 0 to 15 percent
Depth to effervescence: 0 to 10 inches
Hue: 2.5Y through 7.5YR

A horizon:
Reaction: mildly alkaline or moderately alkaline

C horizons:
Texture: fine sandy loam, sandy loam, loam, or clay loam
Reaction: mildly alkaline through strongly alkaline

Thenipel Series

Map unit(s): 69
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: fans, hills
Position on landform: footslopes, toeslopes
Parent material: alluvium and loess derived from siltstone
Elevation: 6,100 to 7,200 feet (1,859 to 2,194 meters)
Slope: 3 to 12 percent
Climatic data:
Mean annual precipitation: 9 to 11 inches (228 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine-silty, mixed Borollic Camborthids

Typical Pedon

Map unit in which located: Fenster-Thenipel complex, 3 to 12 percent slopes
Location in the survey area: about 1,700 feet west and 2,200 feet north of the southeast corner of sec. 18, T. 10 N., R. 98 W.

A—0 to 2 inches; pale brown (10YR 6/3) silt loam, dark yellowish brown (10YR 3/4) moist; weak fine granular structure; slightly hard, friable, sticky and plastic; violently effervescent; moderately alkaline; gradual smooth boundary.
Bw1—2 to 13 inches; light yellowish brown (10YR 6/4) silty clay loam, dark yellowish brown (10YR 4/4) moist; moderate medium prismatic structure parting to moderate medium subangular blocky; slightly hard, friable, sticky and plastic; violently effervescent; moderately alkaline; gradual smooth boundary.
Bw2—13 to 25 inches; very pale brown (10YR 7/4) silty clay loam, dark yellowish brown (10YR 4/6) moist; moderate medium prismatic structure parting to weak fine angular blocky; slightly hard, friable, sticky and plastic; 5 percent channers; violently effervescent; moderately alkaline; gradual smooth boundary.

Bk1—25 to 37 inches; pale yellow (2.5Y 7/4) silty clay loam, yellowish brown (10YR 5/6) moist; weak medium subangular blocky structure; slightly hard, friable, sticky and plastic; 5 percent channers; few fine seams of segregated calcium carbonate; violently effervescent; moderately alkaline; gradual smooth boundary.
Bk2—37 to 60 inches; pale yellow (2.5Y 7/4) silty clay loam, yellowish brown (10YR 5/6) moist; weak medium subangular blocky structure; slightly hard, friable, sticky and plastic; 5 percent channers; few fine seams of segregated calcium carbonate; violently effervescent; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 0 to 10 percent channers
Hue: 10YR or 2.5Y

Bw and Bk1 horizons:
Texture: silty clay loam, loam, or silt loam
Rock fragment content: 0 to 5 percent

Bk2 horizon:
Texture: silty clay loam, silt loam, or loam
Rock fragment content: 5 to 15 percent

Thornburgh Series

Map unit(s): 124
Local phase(s): dry
Depth class: very deep
Drainage class: well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: concave and snow catchment areas on mountainsides
Parent material: colluvium derived from relict fluvial deposits
Elevation: 7,500 to 9,500 feet (2,286 to 2,896 meters)
Slope: 25 to 65 percent
Climatic data:
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Frost-free period: 50 to 75 days

Taxonomic class: Loamy-skeletal, mixed Typic Cryoborolls

Typical Pedon

Map unit in which located: Losee-Thornburgh, dry, complex, 25 to 65 percent slopes
Location in the survey area: about 400 feet north and 1,300 feet east of the southwest corner of sec. 3, T. 11 N., R. 102 W.

A—0 to 14 inches; dark grayish brown (10YR 4/2) very cobbly sandy loam, very dark brown (10YR 2/2) moist; weak medium granular structure; soft, very friable, nonsticky and nonplastic; 15 percent gravel, 25 percent cobbles, 10 percent stones, neutral; clear wavy boundary.
Bw—14 to 27 inches; light yellowish brown (10YR 6/4) very cobbly sandy loam, dark yellowish brown (10YR 4/4) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; 15 percent gravel, 25 percent cobbles, 15 percent stones; neutral; clear wavy boundary.
C—27 to 60 inches; brownish yellow (10YR 6/6) very cobbly sandy loam, yellowish brown (10YR 5/6) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and slightly plastic; 15 percent gravel, 25 percent cobbles, 15 percent stones; mildly alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 10 to 18 percent
Rock fragment content: 35 to 65 percent
Hue: 7.5YR or 10YR
Reaction: neutral or mildly alkaline
Thickness of the mollic epipedon: 10 to 15 inches

Tipper Series

Map unit(s): 189
Depth class: moderately deep
Drainage class: excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Landform: hills
Position on landform: backslopes, footslopes, toeslopes
Parent material: local alluvium and residuum derived from sandstone
Elevation: 5,400 to 6,000 feet (1,646 to 1,829 meters)
Slope: 10 to 40 percent
Climatic data:
Mean annual precipitation: 7 to 10 inches (178 to 254 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Frost-free period: 90 to 105 days

Taxonomic class: Mixed, mesic Typic Torripsamments

Typical Pedon

Map unit in which located: Tipper-Crustown complex, 10 to 40 percent slopes
Location in the survey area: about 2,400 feet east and 1,500 feet north of the southwest corner of sec. 32, T. 9 N., R. 101 W.

A—0 to 1 inch; pale brown (10YR 6/3) loamy fine sand; brown (10YR 5/3) moist; weak medium platy structure parting to weak thin platy; soft, very friable, nonsticky and nonplastic; strongly effervescent; moderately alkaline; abrupt smooth boundary.
BA—1 inch to 10 inches; very pale brown (10YR 7/3) loamy fine sand, brown (10YR 5/3) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; violently effervescent; moderately alkaline; gradual smooth boundary.
Bk—10 to 28 inches; very pale brown (10YR 7/3) loamy fine sand, pale brown (10YR 6/3) moist; massive; soft, very friable, nonsticky and nonplastic; few fine concentrations of calcium carbonate; violently effervescent; strongly alkaline; clear wavy boundary.
Cr—28 inches; weakly consolidated sandstone bedrock.

Range in Characteristics

Depth to paralithic contact: 20 to 40 inches

Bk horizon:
Reaction: moderately alkaline or strongly alkaline

Tipperary Series

Map unit(s): 61, 190, 191, 192, 211, 212
Local phase(s): cobbly substratum
Depth class: very deep
Drainage class: excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Landform: benches, terrace escarpments, hills, hillslopes, plateaus
Position on landform: toeslopes
Parent material: eolian deposits and alluvium derived from mixed sources, eolian deposits and alluvium derived from sandstone, eolian deposits derived form mixed sources, eolian deposits derived from mixed sources, eolian deposits over alluvium derived from mixed sources
Elevation: 5,300 to 6,000 feet (1,615 to 1,829 meters)
Slope: 1 to 40 percent
Climatic data:
Mean annual precipitation: 7 to 10 inches (178 to 254 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Frost-free period: 90 to 105 days

Taxonomic class: Mixed, mesic Typic Torripsamments

Typical Pedon

Map unit in which located: Tipperary loamy fine sand, 3 to 12 percent slopes
Location in the survey area: about 1,200 feet east and 300 feet north of the southwest corner of sec. 14, T. 9 N., R. 102 W.

A—0 to 3 inches; light yellowish brown (10YR 6/4) loamy fine sand, dark yellowish brown (10YR 4/4); moist weak medium platy structure parting to weak thin platy; soft, very friable, nonsticky and nonplastic; strongly effervescent; moderately alkaline; abrupt smooth boundary.
Bk1—3 to 30 inches; very pale brown (10YR 7/4) loamy fine sand, yellowish brown (10YR 5/4) moist; massive; soft, very friable, nonsticky and nonplastic; few fine concentrations of calcium carbonate; strongly effervescent; moderately alkaline; gradual smooth boundary.
Bk2—30 to 43 inches; very pale brown (10YR 8/3) loamy fine sand, light yellowish brown (10YR 6/4) moist; massive; soft, very friable, nonsticky and nonplastic; 10 percent fine gravel; few fine concentrations of calcium carbonate; strongly effervescent; strongly alkaline; gradual smooth boundary.
C—43 to 60 inches; very pale brown (10YR 7/4) fine sand, yellowish brown (10YR 5/4) moist; single grained; loose, nonsticky and nonplastic; strongly effervescent; moderately alkaline.

Range in Characteristics

Note: The Tipperary soil in the map unit #212 Willwood-Tipperary, cobbly substratum, complex, 1 to 12 percent slopes, is a taxadjunct to the Tipperary series because it has a sandy-skeletal 2C horizon at a depth of 36 inches. The depth to this 2C horizon ranges from 25 to 40 inches. The texture of the 2C horizon is extremely gravelly sand, very gravelly sand, or very cobbly sand. The hue of this 2C horizon is 7.5YR or 10YR. It is not strongly contrasting but does change the classification and affects management in map unit #212.

A horizon:
Texture: loamy fine sand or sand

Bk and C horizons:
Texture: loamy sand, loamy fine sand, fine sand, or sand
Rock fragment content: 0 to 15 percent gravel
Note: In some pedons, the Bk horizons are absent.

Tisworth Series

Map unit(s): 193
Depth class: very deep
Drainage class: well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Landform: alluvial fans, stream terraces
Parent material: alluvium derived from mixed sources
Elevation: 6,000 to 7,000 feet (1,829 to 2,134 meters)
Slope: 0 to 9 percent
Climatic data:
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine-loamy, mixed Borollic Natrargids

Typical Pedon

Map unit in which located: Tisworth fine sandy loam, 0 to 9 percent slopes
Location in the survey area: about 500 feet west and 350 feet north of the southeast corner of sec. 27, T. 6 N., R. 94 W.

E—0 to 3 inches; pale brown (10YR 6/3) fine sandy loam, dark brown (10YR 4/3) moist; weak medium platy structure parting to moderate medium platy; soft, very friable, nonsticky and nonplastic; mildly alkaline; abrupt smooth boundary.
Btn—3 to 12 inches; yellowish brown (10YR 5/4) clay loam, dark yellowish brown (10YR 4/4) moist; moderate fine prismatic structure parting to moderate fine subangular blocky; hard, friable, sticky and plastic; common distinct clay films on faces of peds; strongly effervescent; strongly alkaline; clear wavy boundary.
Bkn1—12 to 18 inches; pale brown (10YR 6/3) loam, yellowish brown (10YR 4/3) moist; moderate coarse subangular blocky structure parting to moderate medium subangular blocky; slightly hard, very friable, slightly sticky and slightly plastic; common fine concentrations of calcium carbonate; strongly effervescent; very strongly alkaline; clear wavy boundary.
Bkn2—18 to 60 inches; light gray (10YR 7/2) loam with thin lenses of clay loam and sandy loam, grayish brown (10YR 5/2) moist; thin, medium, and thick platy rock structure; slightly hard, very friable, slightly sticky and slightly plastic; few fine concentrations of calcium carbonate; violently effervescent; strongly alkaline.

Range in Characteristics

Depth to effervescence: 3 to 15 inches
Depth to natric horizon: 10 to 20 inches

E horizon:
Reaction: mildly alkaline or moderately alkaline

Btn horizon:
Hue: 10YR or 7.5YR
Texture: loam, clay loam, or sandy clay loam
Exchangeable sodium percentage: 15 to 30 percent

Bkn horizons:
Hue: 10YR or 2.5Y
Texture: stratified loamy sand, sandy loam, loam, or clay loam
Clay content: 10 to 27 percent
Rock fragment content: 0 to 15 percent gravel

Toliver Series

Map unit(s): 268
Local phase(s): none specified
Depth class: deep
Drainage class: well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: hills
Parent material: loamy-skeletal colluvium derived from sandstone
Elevation: 6,500 to 7,800 feet (1,981 to 2,377 meters)
Slope: 50 to 80 percent
Climatic data:
Mean annual precipitation: 12 to 16 inches (305 to 406 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 90 to 110 days

Taxonomic class: Loamy-skeletal, siliceous, superactive, frigid Torriorthentic Haplustolls

Typical Pedon

Map unit in which located: Toliver-Rock outcrop association, 50 to 80 percent slopes, from the Uintah Area, Utah soil survey

Location in the Uintah Area, Utah survey area: about 1/4 mile south of Stuntz Ridge; about 2,300 feet south and 1,400 feet west of the northeast corner of sec. 23, T. 5 S., R. 25 E., SLBM; Snake John Reef, Utah-Colo. USGS quadrangle; latitude 40 degrees, 22 minutes, 19 seconds north and longitude 109 degrees, 3 minutes, 51 seconds west; NAD 27.

The soil surface is covered by 15 percent channers, 25 percent flagstones, and 10 percent stones.

A—0 to 7 inches; yellowish brown (10YR 5/4) extremely flaggy fine sandy loam, dark brown (10YR 3/3) moist; weak fine subangular blocky structure parting to weak very fine granular; soft, very friable, nonsticky and nonplastic; many very fine and fine, common medium roots; many very fine and fine, few medium interstitial pores; 10 percent channers and 10 percent flagstones; slightly effervescent; calcium carbonate is disseminated; moderately alkaline (pH 8.0); clear wavy boundary. (The horizon ranges from 7 to 12 inches thick.)

C1—7 to 19 inches; brown (10YR 5/3) channery fine sandy loam, dark grayish brown (10YR 4/2) moist; weak fine and very fine subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; common very fine, fine, and medium, few coarse roots; common very fine and fine interstitial pores; 10 percent flagstones and 20 percent channers; slightly effervescent; calcium carbonate is disseminated; moderately alkaline (pH 8.1); gradual wavy boundary.

C2—19 to 34 inches; pale brown (10YR 6/3) very flaggy fine sandy loam, brown (10YR 4/3) moist; weak medium through very fine subangular blocky structure; slightly hard, very friable slightly sticky and slightly plastic; common very fine, fine, and medium, few coarse roots; common very fine and fine interstitial pores; 15 percent channers, 20 percent flagstones, and 5 percent stones; slightly effervescent; calcium carbonate is disseminated; moderately alkaline (pH 8.2); gradual irregular boundary.

C3—34 to 47 inches; pale brown (10YR 6/3) very flaggy fine sandy loam, brown (10YR 5/3) moist; weak medium and fine subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; common very fine, fine, and medium, few coarse roots; common very fine, few fine, and medium interstitial pores; 5 percent stones, 25 percent flagstones, and 15 percent channers; slightly effervescent; calcium carbonate is disseminated; moderately alkaline (pH 8.2); gradual irregular boundary.

C4—47 to 59 inches; pale brown (10YR 6/3) very flaggy fine sandy loam, brown (10YR 4/3) moist; massive; loose, very friable, slightly sticky and slightly plastic; few very fine and coarse and common fine, and medium roots; 5 percent stones, 25 percent flagstones, and 15 percent channers; slightly effervescent; calcium carbonate is disseminated; moderately alkaline (pH 8.2). (The combined thickness of the C horizons is 28 to 53 inches.)

R—59 inches; unweathered sandstone bedrock.

Range in Characteristics

Particle-size control section (weighted average):
- *Clay content:* 5 to 18 percent
- *Rock fragment content:* 35 to 60 percent, predominantly flagstones and channers from sandstone
- *Surface rock fragments:* 35 to 60 percent, predominantly stones and flagstones

Depth to lithic contact: 40 to 60 inches to sandstone

Mean annual soil temperature: 44 to 47 degrees F.

Moisture control section: is affected by precipitation that falls evenly throughout the year with a slight increase in late summer and early fall

Moisture regime: ustic bordering on aridic

Thickness of the mollic epipedon: 7 to 12 inches

A horizon:
- *Hue:* 7.5YR or 10YR
- *Value:* 5 dry, 2 or 3 moist
- *Chroma:* 4 dry, 3 moist
- *Texture:* extremely flaggy fine sandy loam
- *Rock fragment content:* 60 to 80 percent channers and flagstones
- *Reaction:* moderately alkaline

C horizon:
- *Hue:* 7.5YR or 10YR
- *Value:* 5 or 6 dry, 4 or 5 moist
- *Chroma:* 3 to 6 dry or moist
- *Texture:* channery fine sandy loam or very flaggy fine sandy loam
- *Rock fragment content:* 15 to 59 percent channers and flagstones
- *Calcium carbonate equivalent:* 1 to 10 percent
- *Reaction:* moderately alkaline

Tolman Series

Map unit(s): 194
Local phase(s): none specified
Depth class: shallow
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: mountainsides, plateaus
Parent material: residuum derived from sandstone
Elevation: 6,600 to 7,300 feet (2,012 to 2,225 meters)
Slope: 10 to 30 percent
Climatic data:
Mean annual precipitation: 16 to 18 inches (406 to 457 millimeters)
Mean annual air temperature: 40 to 43 degrees F. (4.4 to 6.1 degrees C.)
Frost-free period: 65 to 85 days

Taxonomic class: Loamy-skeletal, mixed Lithic Argiborolls

Typical Pedon

Map unit in which located: Tolman-Duffymont complex, 10 to 30 percent slopes, extremely stony
Location in the survey area: 650 feet north and 650 feet west of the southeast corner of sec. 23, T. 5 N., R. 93 W.

A—0 to 6 inches; dark brown (10YR 4/3) very stony fine sandy loam, dark brown (10YR 3/3) moist; weak fine granular structure; soft, very friable, nonsticky and nonplastic; few fine roots; 10 percent gravel, 15 percent cobbles, 20 percent stones; mildly alkaline; clear smooth boundary.
Bt1—6 to 10 inches; dark brown (7.5YR 4/2) very stony sandy clay loam, dark brown (7.5YR 3/2) moist; moderate medium subangular blocky structure parting to weak medium subangular blocky; slightly hard, friable, slightly sticky and slightly plastic; very few faint clay films on faces of peds; few fine roots; 20 percent gravel, 15 percent cobbles, 20 percent stones; mildly alkaline; clear wavy boundary.
Bt2—10 to 15 inches; yellowish brown (10YR 5/4) extremely stony sandy clay loam, dark brown (7.5YR 4/4) moist; moderate coarse subangular blocky structure parting to moderate medium subangular blocky; hard, friable, slightly sticky and slightly plastic; few faint clay films on faces of peds; few fine roots; 25 percent gravel, 25 percent cobbles, 25 percent stones; mildly alkaline; clear wavy boundary.
R—15 inches; Hard sandstone bedrock.

Range in Characteristics

Depth to lithic contact: 10 to 20 inches
Hue: 7.5YR or 10YR
Reaction: neutral or mildly alkaline
Thickness of the mollic epipedon: 7 to 12 inches

Bt1 horizon:
Texture: very stony or extremely stony sandy clay loam
Rock fragment content: 35 to 60 percent

Bt2 horizon:
Rock fragment content: 60 to 75 percent

Torriorthents

Map unit(s): 160, 195, 196, 197, 198, 199, 245
Local phase(s): none specified
Depth class: very shallow to moderately deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: breaks, canyons, hills, hillslopes, mountains, mountainsides
Position on landform: backslopes, footslopes
Parent material: colluvium and residuum derived from sandstone and shale, colluvium and/or residuum weathered from limestone and sandstone, residuum and colluvium derived from sandstone and shale, residuum derived from interbedded sandstone and shale, residuum derived from sandstone and shale, residuum derived from shale
Elevation: 5,000 to 8,000 feet (1,524 to 2,438 meters)
Slope: 3 to 75 percent
Climatic data:
Mean annual precipitation: 9 to 16 inches (228 to 406 millimeters)
Mean annual air temperature: 42 to 48 degrees F. (5.6 to 8.9 degrees C.)
Frost-free period: 75 to 105 days

Taxonomic class: Torriorthents

Typical Pedon

Map unit in which located: Torriorthents-Rock outcrop, sandstone, complex, 25 to 75 percent slopes
Location in the survey area: about 1,500 feet east and 2,000 feet north of the southwest corner of sec. 6, T. 5 N., R. 91 W.

A—0 to 2 inches; light gray (5Y 7/1) channery sandy loam, very dark grayish brown (2.4Y 3/2) moist; weak fine and medium granular structure; soft,

very friable, sticky and plastic; 20 percent channers; mildly alkaline; abrupt wavy boundary.
C2—2 to 14 inches; light gray (2.5Y 7/2) very channery sandy loam, light brownish gray (2.5Y 6/2) moist; massive; soft, slightly sticky and nonplastic; 10 percent gravel, 20 percent channers, 10 percent flagstones; slightly effervescent; mildly alkaline; abrupt smooth boundary.
R—14 inches plus; pale yellow (2.5Y 8/4) calcareous medium grained sandstone.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 15 to 60 percent
Depth to effervescence: 0 to 10 inches
Depth to lithic or paralithic contact: 4 to 30 inches
Hue: 2.5YR through 5Y
Texture: sandy loam, loam, sandy clay loam, clay loam, silty clay loam, or clay
Reaction: mildly alkaline to strongly alkaline

Torripsamments

Map unit(s): 199
Local phase(s): none specified
Depth class: moderately deep
Drainage class: excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Landform: hillslopes
Position on landform: footslopes
Parent material: eolian deposits and residuum derived from sandstone
Elevation: 6,000 to 7,200 feet (1,829 to 2,194 meters)
Slope: 12 to 40 percent
Climatic data:
Mean annual precipitation: 9 to 13 inches (229 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Torripsamments

Typical Pedon

Map unit in which located: Torriorthents-Torripsamments complex, 12 to 40 percent slopes
Location in the survey area: about 1,500 feet east and 1,500 feet north of the southwest corner of sec. 14, T. 9 N., R. 96 W.

A—0 to 4 inches; light yellowish brown (2.5Y 6/4) sand, light olive brown (2.5Y 5/4) moist; single grained; loose, nonsticky and nonplastic; mildly alkaline; clear smooth boundary.
AC—4 to 16 inches; light yellowish brown (2.5Y 6/4) sand, light olive brown (2.5Y 5/4) moist; single grained; loose, nonsticky and nonplastic; mildly alkaline; clear wavy boundary.
C—16 to 26 inches; yellow (2.5Y 8/6) sand, yellow (2.5Y 7/6) moist; weak medium platy rock structure; soft, very friable, nonsticky and nonplastic; slightly effervescent; mildly alkaline; abrupt wavy boundary.
R—26 inches; yellow (2.5Y 7/6) weakly calcareous hard sandstone bedrock; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 0 to 25 percent
Depth to effervescence: 0 to 60 inches or more
Depth to lithic or paralithic contact: 20 to 60 inches or more

A horizon:
Hue: 2.5Y to 5YR
Texture: loamy sand or sand
Reaction: neutral to mildly alkaline

AC and C horizons:
Hue: 2.5Y to 5YR
Texture: loamy sand, sand, or gravelly sand
Reaction: neutral to moderately alkaline

Tresano Series

Map unit(s): 200, 201
Local phase(s): none specified
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: alluvial fans, hills, plateaus
Position on landform: footslopes, toeslopes
Parent material: alluvium derived from sandstone and shale, eolian deposits derived from sandstone
Elevation: 6,000 to 7,000 feet (1,829 to 2,134 meters)
Slope: 2 to 12 percent
Climatic data:
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine-loamy, mixed, frigid Typic Haplargids

Typical Pedon

Map unit in which located: Tresano sandy loam, 3 to 12 percent slopes
Location in the survey area: about 1,000 feet north and 500 feet west of the southeast corner of sec. 35, T. 12 N., R. 99 W.

A—0 to 3 inches; light yellowish brown (10YR 6/4) sandy loam, brown (10YR 4/3) moist; weak medium granular structure; soft, very friable, nonsticky and nonplastic; mildly alkaline; abrupt smooth boundary.
AB—3 to 8 inches; yellowish brown (10YR 5/4) sandy loam, brown (10YR 4/3) moist; weak coarse subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; mildly alkaline; clear wavy boundary.
Bt—8 to 14 inches; brown (7.5YR 5/4) clay loam, dark brown (7.5YR 4/4) moist; moderate medium subangular blocky structure; hard, friable, sticky and plastic; few faint clay films on faces of peds and along interstitial pores; mildly alkaline; clear wavy boundary.
Bk1—14 to 20 inches; pink (7.5YR 7/4) sandy clay loam, strong brown (7.5YR 5/6) moist; moderate medium subangular blocky structure; hard, friable, sticky and plastic; common fine concentrations of calcium carbonate; violently effervescent; moderately alkaline; gradual wavy boundary.
Bk2—20 to 30 inches; light brown (7.5YR 6/4) sandy clay loam, strong brown (7.5YR 5/6) moist; moderate medium subangular blocky structure; hard, friable, sticky and plastic; common fine concentrations of calcium carbonate; strongly effervescent; strongly alkaline; gradual wavy boundary.
Bk3—30 to 60 inches, light brown (7.5YR 6/4) sandy loam, strong brown (7.5YR 5/6) moist; massive; hard, friable, slightly sticky and slightly plastic; common fine concentrations of calcium carbonate; violently effervescent; moderately alkaline.

Range in Characteristics

Depth to secondary calcium carbonate: 12 to 24 inches
Note: The Tresano soil in the map unit #201 of Tresano-Hiatha-Kandaly association, 2 to 12 percent slopes, is outside the range of the Tresano series because the Bt and Bk horizons have a hue of 5YR in most pedons. Hue ranges from 5YR to 7.5YR.

Bt horizon:
Hue: 7.5YR or 10YR
Clay content: 20 to 30 percent
Texture: clay loam, loam, or sandy clay loam

Bk1 and Bk2 horizons:
Hue: 7.5YR to 2.5Y
Texture: sandy loam, loam, or sandy clay loam

Bk3 horizon:
Hue: 7.5YR to 2.5Y
Texture: loam or sandy loam

Tricera Series

Map unit(s): 177, 208
Local phase(s): none specified
Depth class: very deep
Drainage class: excessively drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: hills, hillslopes, leeward hillslopes, plateaus
Position on landform: summits
Parent material: eolian deposits and alluvium derived from sandstone, eolian deposits derived from sandstone
Elevation: 5,700 to 6,600 feet (1,737 to 2,012 meters)
Slope: 3 to 15 percent
Climatic data:
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Frost-free period: 90 to 105 days

Taxonomic class: Mixed, mesic Typic Torripsamments

Typical Pedon

Map unit in which located: Wallson-Tricera complex, 3 to 15 percent slopes
Location in the survey area: about 2,500 feet south and 1,900 feet west of the northeast corner of sec. 14, T. 3 N., R. 104 W.

A—0 to 4 inches; yellowish brown (10YR 5/4) loamy fine sand, dark yellowish brown (10YR 4/4) moist; weak coarse platy structure; soft, very friable, nonsticky and nonplastic; neutral; abrupt smooth boundary.
Bw1—4 to 15 inches; brown (7.5YR 5/4) loamy fine sand, dark brown (7.5YR 4/4) moist; weak medium and coarse subangular blocky structure; slightly hard, very friable, slightly sticky and

nonplastic; mildly alkaline; clear smooth boundary.
Bw2—15 to 25 inches; strong brown (7.5YR 5/6) loamy fine sand, strong brown (7.5YR 4/6) moist; weak coarse subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; mildly alkaline; gradual smooth boundary.
C—25 to 47 inches; strong brown (7.5YR 5/6) loamy fine sand, strong brown (7.5YR 4/6) moist; massive; soft, very friable, nonsticky and nonplastic; mildly alkaline; clear smooth boundary.
Ck—47 to 60 inches; light brown (7.5YR 6/4) fine sand, brown (7.5YR 5/4) moist; single grained, loose, nonsticky and nonplastic; few fine seams of visible calcium carbonate; slightly effervescent; moderately alkaline.

Range in Characteristics

Depth to lithic contact: 40 inches or more
Depth to secondary calcium carbonate: 40 inches or more
Hue: 7.5YR or 10YR

A horizon:
Texture: loamy sand or loamy fine sand
Reaction: neutral or mildly alkaline

Bw horizon: (if present)
Texture: loamy fine sand or loamy sand

C horizon:
Texture: loamy fine sand, fine sand, or sand

Tridell Series

Map unit(s): 266
Local phase(s): none specified
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: hills
Parent material: slope alluvium and colluvium derived from sandstone, limestone, shale, and quartzite
Elevation: 6,000 to 7,000 feet (1,829 to 2,134 meters)
Slope: 25 to 50 percent
Climatic data:
Mean annual precipitation: 12 to 16 inches (305 to 406 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 90 to 110 days

Taxonomic class: Loamy-skeletal, mixed, superactive, frigid Aridic Calciustolls

Typical Pedon

Map unit in which located: Tridell-Ironco association, 15 to 50 percent slopes, from the Uintah Area, Utah Soil Survey
Location in the Uintah Area, Utah survey area: about 6 miles north of Red Fleet Reservoir; about 1,800 feet south and 1,800 feet west of the northeast corner of sec. MS 6907, T. 2 S., R. 22 E., SLBM; Burnt Cabin Gorge, Utah USGS quadrangle; latitude 40 degrees, 39 minutes, 30 seconds north and longitude 109 degrees, 23 minutes, 35 seconds west; NAD 27.

The soil surface is covered by 20 percent cobbles and 30 percent gravel.

A—0 to 4 inches; brown (10YR 5/3) very cobbly loam, dark brown (7.5YR 3/2) moist; moderate fine and very fine granular structure; soft, friable, slightly sticky and slightly plastic; few coarse, medium and fine, many very fine roots; few medium, common fine, and many very fine tubular pores; 5 percent cobbles and 20 percent gravel; very slightly effervescent; 8 percent calcium carbonate equivalent; calcium carbonate is disseminated; moderately alkaline (pH 8.0); abrupt smooth boundary. (The horizon ranges from 4 to 11 inches thick.)
Bw—4 to 10 inches; brown (10YR 5/3) gravelly loam, dark brown (10YR 3/3) moist; moderate medium subangular blocky structure parting to moderate fine and very fine subangular blocky; slightly hard, friable, slightly sticky and slightly plastic; few medium and coarse and common fine and very fine roots; few medium, common fine and very fine random tubular pores; 5 percent cobbles and 25 percent gravel; slightly effervescent; 15 percent calcium carbonate equivalent; calcium carbonate is disseminated; moderately alkaline (pH 8.0); abrupt smooth boundary. (The horizon ranges from 0 to 12 inches thick.)
Bk1—10 to 15 inches; pale brown (10YR 6/3) very gravelly loam, brown (10YR 4/3) moist; moderate fine and very fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; few medium and coarse and common fine and very fine roots; few medium, common fine and very fine tubular pores; 5 percent cobbles and 35 percent gravel; strongly effervescent; 28 percent calcium carbonate equivalent; calcium carbonate is disseminated and segregated as less than 1 mm thick coatings on underside of rock fragments; moderately

alkaline (pH 8.2); clear smooth boundary. (The horizon ranges from 5 to 16 inches thick.)

Bk2—15 to 29 inches; very pale brown (10YR 7/3) very gravelly loam, yellowish brown (10YR 5/4) moist; moderate medium and fine subangular blocky structure; very hard, friable, slightly sticky and slightly plastic; few fine and very fine roots; few medium common fine and very fine tubular pores; 5 percent cobbles and 35 percent gravel; strongly effervescent; 29 percent calcium carbonate equivalent; calcium carbonate is disseminated and segregated as less than 1 mm thick coatings around rock fragments and as common irregular medium masses; moderately alkaline (pH 8.2);clear wavy boundary. (The horizon ranges from 7 to 32 inches thick.)

Bk3—29 to 49 inches; very pale brown (10YR 8/3) very gravelly loam, light yellowish brown (10YR 6/4) moist; moderate medium and fine subangular blocky structure; hard, friable, moderately sticky and slightly plastic; few fine and very fine roots; few medium, common fine and many very fine tubular pores; 5 percent cobbles and 30 percent gravel; strongly effervescent; 31 percent calcium carbonate equivalent; calcium carbonate is disseminated and segregated as less than 1 mm thick coatings on rock fragments and few cylindrical fine masses; strongly alkaline (pH 8.6); gradual wavy boundary. (The horizon ranges from 0 to 20 inches thick.)

Bk4—49 to 60 inches; very pale brown (10YR 8/3) very gravelly loam, pale brown (10YR 6/3) moist; massive; hard, friable, moderately sticky and slightly plastic; few medium, common fine, and many very fine tubular pores; 35 percent gravel; strongly effervescent; 35 percent calcium carbonate equivalent; calcium carbonate is disseminated and segregated as less than 1 mm thick coatings on rock fragments and few fine irregular fine masses; strongly alkaline (pH 8.6).

Range in Characteristics

Particle-size control section (weighted average):
- *Clay content:* 18 to 27 percent
- *Rock fragment content:* 35 to 70 percent

Depth to calcic horizon: 7 to 21 inches
Depth to secondary calcium carbonate: 7 to 21 inches
Mean annual air temperature: 42 to 45 degrees F
Mean annual soil temperature: 44 to 47 degrees F
Moisture control section: is affected by precipitation that falls evenly throughout the year with a slight increase in the late summer and fall
Moisture regime: ustic bordering on aridic

A horizon:
- *Hue:* 7.5YR or 10YR
- *Value:* 4 or 5 dry, 2 or 3 moist
- *Chroma:* 3 or 4 dry, 2 or 3 moist
- *Texture:* very cobbly loam, cobbly loam, or extremely cobbly loam
- *Rock fragment content:* 15 to 80 percent gravel, cobbles, and stones
- *Calcium carbonate equivalent:* 1 to 10 percent
- *Reaction:* slightly alkaline or moderately alkaline

Bw horizon:
- *Hue:* 5YR to 10YR
- *Value:* 4 to 6 dry, 3 to 5 moist
- *Chroma:* 3 or 4 dry or moist
- *Texture:* gravelly loam, very gravelly loam, very cobbly loam, or very gravelly loam
- *Rock fragment content:* 15 to 59 percent gravel, cobbles, and stones
- *Calcium carbonate equivalent:* 5 to 15 percent
- *Reaction:* moderately alkaline

Bk horizon:
- *Hue:* 5YR to 10YR
- *Value:* 5 to 8 dry, 4 to 6 moist
- *Chroma:* 3 or 4
- *Texture:* very gravelly loam, very cobbly loam, extremely cobbly loam, or very cobbly sandy clay loam
- *Rock fragment content:* 35 to 80 percent gravel, cobbles, and stones
- *Calcium carbonate equivalent:* 15 to 40 percent
- *Reaction:* moderately alkaline or strongly alkaline

C horizon:
- *Hue:* 5YR or 7.5YR
- *Value:* 7 dry, 5 or 6 moist
- *Chroma:* 4 to 6 dry or moist
- *Texture:* very cobbly loam, extremely cobbly loam, very gravelly loam, or very cobbly sandy loam
- *Rock fragment content:* 35 to 75 percent gravel, cobbles, and stones
- *Calcium carbonate equivalent:* 15 to 40 percent
- *Reaction:* moderately alkaline or strongly alkaline

Turzo Series

Map unit(s): 202, 203
Local phase(s): saline
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: alluvial fans, hills
Position on landform: toeslopes

Parent material: alluvium derived from sandstone and shale
Elevation: 5,600 to 6,200 feet (1,707 to 1,890 meters)
Slope: 0 to 8 percent
Climatic data:
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Frost-free period: 90 to 105 days

Taxonomic class: Fine-loamy, mixed (calcareous), mesic Typic Torriorthents

Typical Pedon

Map unit in which located: Turzo loam, 0 to 5 percent slopes
Location in the survey area: about 1,500 feet east and 1,500 feet north of the southwest corner of sec. 30, T. 9 N., R. 96 W.

A—0 to 4 inches; very pale brown (10YR 7/4) loam, yellowish brown (10YR 5/4) moist; weak thin platy structure parting to moderate fine granular; soft, very friable, nonsticky and nonplastic; violently effervescent; moderately alkaline; clear smooth boundary.
AC—4 to 10 inches; light yellowish brown (10YR 6/4) loam, yellowish brown (10YR 5/4) moist; weak thin platy structure parting to weak fine granular; soft, very friable, slightly sticky and slightly plastic; violently effervescent; moderately alkaline; gradual smooth boundary.
C1—10 to 23 inches; light yellowish brown (10YR 6/4) loam, yellowish brown (10YR 5/4) moist; weak fine subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; violently effervescent; moderately alkaline; gradual smooth boundary.
C2—23 to 60 inches; light yellowish brown (10YR 6/4) loam, yellowish brown (10YR 5/4) moist; weak fine subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; violently effervescent; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 0 to 10 percent
Depth to effervescence: throughout
Hue: 10YR or 2.5Y

C horizon:
Texture: loam, sandy clay loam, or clay loam
Reaction: moderately alkaline or strongly alkaline

Tymosling Series

Map unit(s): 65
Depth class: moderately deep
Drainage class: well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Landform: knolls
Parent material: colluvium and residuum derived from conglomerate, sandstone, and shale
Elevation: 7,200 to 8,200 feet (2,195 to 2,499 meters)
Slope: 5 to 15 percent
Climatic data:
Mean annual precipitation: 14 to 16 inches (356 to 406 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine, montmorillonitic Borollic Haplargids

Typical Pedon

Location in the survey area: Emlin-Tymosling complex, 1 to 15 percent slopes, very bouldery
Location in the survey area: about 1,000 feet east and 2,400 feet north of the southwest corner of sec. 24, T. 4 N., R. 103 W.

A—0 to 1 inch; grayish brown (10YR 5/2) very gravelly clay loam, very dark grayish brown (10YR 3/2) moist; moderate fine granular structure; soft, very friable, sticky and slightly plastic; 40 percent gravel, 10 percent boulders; neutral; abrupt smooth boundary.
AB—1 inch to 5 inches; grayish brown (10YR 5/2) gravelly clay loam, dark grayish brown (10YR 4/2) moist; moderate medium subangular blocky structure; slightly hard, friable, sticky and plastic; 15 percent gravel, 5 percent boulders; neutral; clear wavy boundary.
Bt1—5 to 9 inches; grayish brown (10YR 5/2) clay, brown (10YR 4/3) moist; strong medium prismatic structure parting to strong medium angular blocky; very hard, firm, very sticky and plastic; common prominent clay films on faces of peds; 10 percent gravel, 3 percent boulders; mildly alkaline; clear wavy boundary.
Bt2—9 to 14 inches; brown (10YR 5/3) clay, dark yellowish brown (10YR 4/4) moist; moderate medium prismatic structure parting to moderate medium angular blocky; very hard, firm, very sticky and plastic; common prominent clay films on faces of peds; strongly effervescent; moderately alkaline; clear wavy boundary.

Bk1—14 to 22 inches; light gray (2.5Y 7/2) clay, light brownish gray (2.5Y 6/3) moist; moderate medium prismatic structure parting to moderate coarse angular blocky; very hard, firm, very sticky and plastic; common medium masses of calcium carbonate; strongly effervescent; moderately alkaline; clear wavy boundary.
Bk2—22 to 35 inches; light gray (2.5Y 7/2) clay, pale yellow (2.5Y 7/3) moist; weak medium prismatic structure; very hard, firm, very sticky and plastic; common medium masses of calcium carbonate; strongly effervescent; moderately alkaline; gradual wavy boundary.
Cr—35 inches; soft calcareous shale bedrock.

Range in Characteristics

Depth to effervescence: 9 to 20 inches
Depth to paralithic contact: 25 to 40 inches

Bt1 horizon:
Texture: clay loam or clay
Rock fragment content: 5 to 14 percent
Hue: 10YR or 7.5YR

Bt2 horizon:
Hue: 10YR or 7.5YR
Texture: clay or clay loam
Rock fragment content: 0 to 14 percent
Reaction: mildly alkaline or moderately alkaline

Bk horizons:
Hue: 10YR or 2.5Y
Texture: silty clay or clay

Typic Natrargids

Map unit(s): 204
Local phase(s): none specified
Depth class: very deep
Drainage class: well drained
Slowest permeability: .001 to .06 in./hr. (very slow)
Landform: alluvial fans, stream terraces
Parent material: alluvium derived from sandstone, siltstone, and shale
Elevation: 5,300 to 6,000 feet (1,615 to 1,829 meters)
Slope: 0 to 5 percent
Climatic data:
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 105 days

Taxonomic class: Typic Natrargids

Typical Pedon

Map unit in which located: Typic Natrargids, 0 to 5 percent slopes
Location in the survey area: about 3,700 feet north and 2,600 feet west of the southeast corner of sec. 9, T. 3 N., R. 101 W.

A—0 to 2 inches; light brown (7.5YR 6/4) fine sandy loam, brown (7.5YR 4/4) moist; weak medium platy structure parting to weak very thin platy; slightly hard, very friable, slightly sticky and slightly plastic; moderately alkaline; abrupt smooth boundary.
Btn1—2 to 8 inches; reddish brown (5YR 5/4) sandy clay loam, reddish brown (5YR 4/4) moist; moderate coarse prismatic structure parting to moderate medium subangular blocky; hard, firm, sticky and plastic; few faint clay films on faces of peds; strongly effervescent; strongly alkaline; clear smooth boundary.
Btn2—8 to 18 inches; reddish brown (5YR 5/4) sandy clay loam, reddish brown (5YR 4/4) moist; moderate medium and coarse subangular blocky structure; hard, firm, sticky and plastic; few faint clay films on faces of peds; violently effervescent; very strongly alkaline; gradual smooth boundary.
Bk1—18 to 25 inches; yellowish red (5YR 5/6) sandy clay loam, yellowish red (5YR 4/6) moist; moderate medium and coarse platy structure; hard, firm, sticky and plastic; few fine concentrations of calcium carbonate; violently effervescent; strongly alkaline; clear smooth boundary.
Bk2—25 to 35 inches; reddish yellow (5YR 5/6) sandy clay loam, yellowish red (5YR 4/6) moist; moderate medium and coarse platy structure; hard, friable, sticky and plastic; few fine concentrations of calcium carbonate; violently effervescent; strongly alkaline; clear smooth boundary.
2BK3—35 to 45 inches; light reddish brown (5YR 6/4) silty clay loam, reddish brown (5YR 4/4) moist; moderate fine platy rock structure; hard, friable, sticky and slightly plastic; few fine concentrations of calcium carbonate; violently effervescent; very strongly alkaline; gradual smooth boundary.
2Bk4—45 to 52 inches; light reddish brown (5YR 6/4) silty clay loam, reddish brown (5YR 4/4) moist; moderate fine platy rock structure; hard, friable, sticky and slightly plastic; common fine concentrations of calcium carbonate; violently

effervescent; strongly alkaline; gradual smooth boundary.
2C—52 to 60 inches; light reddish brown (5YR 6/4) silty clay loam, reddish brown (5YR 4/4) moist; moderate fine platy rock structure; slightly hard, friable, sticky and slightly plastic; violently effervescent; strongly alkaline.

Range in Characteristics

Depth to effervescence: 2 to 15 inches
Depth to natric horizon: 10 to 30 inches

A horizon:
Hue: 7.5YR or 10YR
Texture: sandy loam or loam
Clay content: 7 to 20 percent
Reaction: moderately alkaline or strongly alkaline

Btn horizon:
Hue: 5YR to 2.5Y
Texture: clay, silty clay, silty clay loam, clay loam, loam, or sandy clay loam
Clay content: 25 to 45 percent

Bk and C horizons:
Hue: 5YR to 5Y
Texture: sand, loamy sand, sandy loam, loam, silt loam, silty clay loam, clay loam, or sandy clay loam
Clay content: 4 to 35 percent
Reaction: moderately alkaline to very strongly alkaline

Uffens Series

Map unit(s): 205
Local phase(s): none specified
Depth class: very deep
Drainage class: well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Landform: alluvial fans, terraces
Parent material: alluvium derived from mixed sources
Elevation: 5,700 to 6,000 feet (1,737 to 1,829 meters)
Slope: 0 to 3 percent
Climatic data:
Mean annual precipitation: 9 to 11 inches (228 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 90 to 105 days

Taxonomic class: Fine-loamy, mixed, mesic Typic Natrargids

Typical Pedon

Map unit in which located: Uffens fine sandy loam, 0 to 3 percent slopes
Location in the survey area: about 660 feet west and 2,300 feet north of the southeast corner of sec. 10, T. 7 N., R. 98 W.

E1—0 to 2 inches; white (10YR 8/2) fine sandy loam, brown (10YR 5/3) moist; strong thick platy structure; soft, very friable, nonsticky and slightly plastic; many very fine continuous vesicular pores; strongly effervescent; very strongly alkaline; abrupt smooth boundary.
E2—2 to 4 inches; pale brown (10YR 6/3) fine sandy loam, brown (10YR 5/3) moist; strong thick platy structure parting to strong thin platy; slightly hard, friable, slightly sticky and slightly plastic; violently effervescent; very strongly alkaline; abrupt smooth boundary.
Btn—4 to 12 inches; yellowish brown (10YR 5/6) clay loam, brown (7.5YR 4/4) moist; strong medium prismatic structure; very hard, firm, sticky and plastic; many distinct clay films on faces of peds; strongly effervescent; very strongly alkaline; clear smooth boundary.
Bk—12 to 37 inches; white (10YR 8/2) fine sandy loam with thin lenses of loamy fine sand and loam, light olive brown (2.5Y 5/4) moist; moderate medium subangular blocky structure; very hard, friable, slightly sticky and slightly plastic; common fine concentrations of calcium carbonate; violently effervescent; very strongly alkaline; abrupt wavy boundary.
C—37 to 60 inches; very pale brown (10YR 7/3) sand, pale brown (10YR 6/3) moist; single grained; loose, nonsticky and nonplastic; strongly effervescent; very strongly alkaline.

Range in Characteristics

Depth to natric horizon: 11 to 24 inches

E horizon:
Hue: 10YR or 2.5Y
Reaction: strongly alkaline or very strongly alkaline

Btn horizon:
Hue: 7.5YR or 10YR
Texture: clay loam or sandy clay loam

Bk and C horizons:
Hue: 7.5YR to 2.5Y

Texture: fine sandy loam, loamy fine sand, or sand stratified with lenses of loam, clay loam, or sandy clay loam
Reaction: strongly alkaline or very strongly alkaline

Ustic Torrifluvents

Map unit(s): 19
Local phase(s): none specified
Depth class: very deep
Drainage class: moderately well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: flood plains
Parent material: alluvium derived from sedimentary rocks
Elevation: 6,000 to 6,800 feet (1,829 to 2,073 meters)
Slope: 0 to 1 percent
Climatic data:
Mean annual precipitation: 11 to 15 inches (279 to 381 millimeters)
Mean annual air temperature: 41 to 45 degrees F. (5.2 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Ustic Torrifluvents

Typical Pedon

Map unit in which located: Borollic Natrargids-Borollic Haplargids-Ustic Torrifluvents complex, 0 to 20 percent slopes
Location in the survey area: about 1,150 feet east and 800 feet south of the northwest corner of sec. 7, T. 7 N., R. 90 W.

A—0 to 4 inches; light brownish gray (10YR 6/2) fine sandy loam, grayish brown (10YR 5/2) moist; weak thin platy structure parting to weak fine granular; slightly hard, friable, slightly sticky and nonplastic; neutral; abrupt smooth boundary.
C1—4 to 6 inches; light gray (10YR 7/2) loamy sand, brown (10YR 5/3) moist; weak fine granular structure; soft, loose, nonsticky and nonplastic; neutral; clear wavy boundary.
C2—6 to 13 inches; light brownish gray (10YR 6/2) silty clay loam, dark grayish brown (10YR 4/2) moist; moderate medium subangular blocky structure; hard, friable, sticky and plastic; mildly alkaline; clear wavy boundary.
C3—13 to 17 inches; light brownish gray (10YR 6/2) silt loam, brown (10YR 4/3) moist; weak medium subangular blocky structure; hard, friable, sticky and plastic; slightly effervescent; moderately alkaline; abrupt smooth boundary.
C4—17 to 22 inches; light gray (10YR 7/2) fine sandy loam, brown (10YR 5/3) moist; massive; soft, very friable, slightly sticky and nonplastic; slightly effervescent; moderately alkaline; abrupt smooth boundary.
C5—22 to 35 inches; pale brown (10YR 6/3) silty clay loam, brown (10YR 5/3) moist; massive; hard, firm, sticky and plastic; strongly effervescent; moderately alkaline; abrupt smooth boundary.
C6—35 to 38 inches; light gray (10YR 7/2) loamy coarse sand, light brownish gray (10YR 6/2) moist; single grained; loose, nonsticky and nonplastic; slightly effervescent; moderately alkaline; abrupt smooth boundary.
C7—38 to 60 inches; pale brown (10YR 6/3) silt loam, brown (10YR 5/3) moist; common medium distinct strong brown (7.5YR 5/6) mottles, moist; massive; hard, firm, sticky and plastic; strongly effervescent; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 10 to 35 percent
Depth to effervescence: 0 to 20 inches
Depth to a seasonal high water table: 3 to 6 feet

C horizons:
Hue: 5Y to 7.5YR
Texture: stratified clay loam, silty clay loam, silt loam, loam, sandy loam, or loamy sand
Reaction: mildly alkaline or moderately alkaline

Ustic Torriorthents

Map unit(s): 92
Local phase(s): shallow
Depth class: very shallow to shallow
Drainage class: well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: hills
Position on landform: backslopes
Parent material: colluvium derived from relict fluvial deposits over residuum derived from sandstone and shale
Elevation: 6,200 to 7,500 feet (1,890 to 2,286 meters)
Slope: 15 to 45 percent
Climatic data:
Mean annual precipitation: 11 to 13 inches (279 to 330 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Ustic Torriorthents

Typical Pedon

Map unit in which located: Grimm-Ustic Torriorthents, shallow, complex, 15 to 45 percent slopes
Location in the survey area: about 1,000 feet south and 1,800 feet west of the northeast corner of sec. 3, T. 10 N., R. 97 W.

A—0 to 2 inches; brown (10YR 5/3) very cobbly sandy loam, brown (10YR 4/3) moist; weak fine granular structure; soft, very friable, slightly sticky and nonplastic; 20 percent gravel, 30 percent cobbles; strongly effervescent; moderately alkaline; clear smooth boundary.
AC—2 to 7 inches; pale brown (10YR 6/3) very cobbly sandy loam, brown (10YR 5/3) moist; weak medium subangular blocky structure; soft, very friable, slightly sticky and nonplastic; 20 percent gravel, 20 percent cobbles; strongly effervescent; moderately alkaline; abrupt smooth boundary.
2C—7 to 18 inches; very pale brown (10YR 7/4) sandy loam, light yellowish brown (10YR 6/4) moist; weak medium subangular blocky structure; soft very friable, slightly sticky and slightly plastic; strongly effervescent; moderately alkaline; gradual smooth boundary.
Cr—18 inches; soft sandstone bedrock.

Range in Characteristics

Particle-size control section (weighted average):
Note: These soils are in the loamy, loamy-skeletal, or clayey particle-size families.
Depth to paralithic contact: 7 to 20 inches

A horizon:
Hue: 10YR or 2.5Y
Texture: very cobbly loamy sand or very cobbly sandy loam; in some areas it is sandy loam or clay

2C horizon:
Hue: 2.5Y through 2.5YR
Texture: sandy loam, sandy clay loam, or clay

Ustorthents

Map unit(s): 206, 245
Local phase(s): frigid
Depth class: shallow to moderately deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: canyons, mountains, mountainsides
Position on landform: backslopes, footslopes
Parent material: colluvium and/or residuum weathered from sedimentary rock, residuum and colluvium derived from sedimentary rocks
Elevation: 5,000 to 8,500 feet (1,524 to 2,591 meters)
Slope: 25 to 75 percent
Climatic data:
Mean annual precipitation: 9 to 20 inches (229 to 508 millimeters)
Mean annual air temperature: 37 to 45 degrees F. (2.8 to 7.2 degrees C.)
Frost-free period: 50 to 105 days

Taxonomic class: Ustorthents

Typical Pedon

Map unit in which located: Ustorthents, frigid-Borolls complex, 25 to 75 percent slopes
Location in the survey area: about 900 feet east and 3,600 feet south of the northwest corner of sec. 13, T. 3 N., R. 91 W.

A—0 to 3 inches; grayish brown (10YR 5/2) very channery sandy loam, dark grayish brown (10YR 4/2) moist; moderate fine granular structure; soft, very friable, nonsticky and nonplastic; 40 percent channers, 20 percent flagstones; neutral; clear wavy boundary.
AC—3 to 8 inches; light yellowish brown (10YR 6/4) very channery sandy loam; dark yellowish brown (10YR 4/4) moist; moderate fine and medium granular structure; soft, friable, nonsticky and nonplastic; 40 percent channers, 20 percent flagstones; mildly alkaline; clear wavy boundary.
C—8 to 20 inches; pale brown (10YR 6/3) extremely channery sandy loam; yellowish brown (10YR 5/4) moist; weak fine granular structure; soft, very friable, nonsticky and nonplastic; 45 percent channers, 20 percent flagstones; strongly effervescent; moderately alkaline; abrupt smooth boundary.
2C—20 to 28 inches; light gray (10YR 7/2) channery clay loam; pale brown (10YR 6/3) moist; weak medium platy structure; slightly hard, friable, sticky and slightly plastic; 20 percent channers, 60 percent soft shale fragments: strongly effervescent; moderately alkaline.
3R—28 inches; sandstone bedrock.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 15 to 65 percent
Depth to effervescence: 5 or more inches

Depth to lithic or paralithic contact: 10 to 30 inches
Reaction: neutral to moderately alkaline

A horizon:
Hue: 7.5YR to 2.5Y
Texture: very channery sandy loam, channery clay loam, or channery loam

C and 2C horizons:
Hue: 5YR to 5Y
Texture: extremely channery sandy loam, very channery loam, or channery clay loam

Vermillion Series

Map unit(s): 207
Depth class: moderately deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: hillslopes, plateaus
Parent material: residuum derived from sandstone and siltstone
Elevation: 6,000 to 6,800 feet (1,829 to 2,073 meters)
Slope: 3 to 25 percent
Climatic data:
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Loamy-skeletal, mixed, frigid Typic Calciorthids

Typical Pedon

Map unit in which located: Vermillion-Langspring complex, 3 to 25 percent slopes
Location in the survey area: about 2,000 feet north and 2,200 feet west of the southeast corner of sec. 22, T. 8 N., R. 97 W.

A—0 to 3 inches; very pale brown (10YR 7/3) loam, dark brown (10YR 3/3) moist; weak medium platy structure parting to weak fine granular structure; soft, very friable, slightly sticky and slightly plastic; 10 percent channers; slightly effervescent; moderately alkaline; abrupt smooth boundary.
Bw—3 to 9 inches; light yellowish brown (10YR 6/4) channery loam, dark yellowish brown (10YR 4/4) moist; weak medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; 15 percent channers; strongly effervescent; moderately alkaline; gradual wavy boundary.
Bk1—9 to 23 inches; white (10YR 8/2) channery loam, very pale brown (10YR 7/3) moist; weak medium subangular blocky structure; slightly hard, very friable, sticky and slightly plastic; 25 percent channers; 35 percent calcium carbonate equivalent; calcium carbonate disseminated; violently effervescent; strongly alkaline; clear wavy boundary.
Bk2—23 to 28 inches; light yellowish brown (10YR 6/4) extremely cobbly loam, yellowish brown (10YR 5/6) moist; massive; soft, very friable, slightly sticky and slightly plastic; 30 percent gravel, 45 percent cobbles; 35 percent calcium carbonate equivalent; calcium carbonate disseminated; strongly effervescent; moderately alkaline; abrupt wavy boundary.
R—28 inches; hard fractured fine-grained calcareous sandstone .

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 35 to 50 percent
Calcium carbonate equivalent: 15 to 40 percent
Depth to effervescence: 0 to 5 inches
Depth to lithic contact: 20 to 40 inches
Depth to secondary calcium carbonate: 8 to 15 inches

A horizon:
Hue: 2.5Y or 10YR

Bw horizon:
Hue: 2.5Y through 7.5YR
Texture: channery loam or channery clay loam

Bk1 horizon:
Hue: 2.5Y through 7.5YR
Texture: channery loam, very cobbly loam, or very cobbly clay loam
Reaction: moderately alkaline or strongly alkaline

Bk2 horizon:
Hue: 2.5Y through 7.5YR
Texture: extremely cobbly clay loam, extremely cobbly loam, or very cobbly loam
Reaction: moderately alkaline or strongly alkaline

Walknolls Series

Map unit(s): 269, 270
Local phase(s): none specified
Depth class: very shallow to shallow
Drainage class: well drained
Slowest permeability: 2.0 to 6.0 in./hr. (moderately rapid)
Landform: hills
Parent material: slope alluvium and colluvium derived

from sandstone, slope alluvium derived from sandstone
Elevation: 5,200 to 6,800 feet (1,585 to 2,073 meters)
Slope: 4 to 50 percent
Climatic data:
Mean annual precipitation: 8 to 12 inches (203 to 305 millimeters)
Mean annual air temperature: 45 to 49 degrees F. (7.2 to 9.5 degrees C.)
Frost-free period: 110 to 140 days

Taxonomic class: Loamy-skeletal, mixed, superactive, mesic Lithic Ustic Haplocalcids

Typical Pedon

Map unit in which located: Walknolls-Gilston association, 2 to 25 percent slopes, from the Uintah Area, Utah Soil Survey
Location in the Uintah Area, Utah survey area: about 3 miles southeast of Bonanza; about 2,000 feet west and 1,300 feet north of the southeast corner of sec. 29, T. 9 S., R. 25 E., SLBM; Walsh Knolls, Utah-Colo. USGS quadrangle; latitude 40 degrees, 00 minutes, 17 seconds north and longitude 109 degrees, 06 minutes, 30 seconds west; NAD 27.

The soil surface is covered by 50 percent channers and 10 percent flagstones.

A—0 to 3 inches; brown (10YR 5/3) very channery loam, dark brown (10YR 3/3) moist; weak thin platy structure parting to weak fine subangular blocky; soft, very friable, slightly sticky and slightly plastic; common fine and very fine roots; few fine and very fine vesicular pores; 15 percent channers and 10 percent gravel; slightly effervescent; 7 percent calcium carbonate equivalent; calcium carbonate is disseminated; moderately alkaline (pH 8.0); clear wavy boundary.
Bk1—3 to 7 inches; pale brown (10YR 6/3) very channery loam, brown (10YR 4/3) moist; weak fine subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; common fine and very fine and few medium roots; 40 percent channers and 10 percent gravel; strongly effervescent; 24 percent calcium carbonate equivalent; calcium carbonate is disseminated and segregated as common 1 mm thick and few 1 to 2 mm thick coatings on the underside of rock fragments; moderately alkaline (pH 8.2); clear wavy boundary.
Bk2—7 to 16 inches; very pale brown (10YR 7/4) extremely channery sandy loam, light yellowish brown (10YR 6/4) moist; massive; soft, very friable, slightly sticky and slightly plastic; few coarse, medium, fine and very fine roots; 60 percent channers and 20 percent flagstones; strongly effervescent; 28 percent calcium carbonate equivalent; calcium carbonate is disseminated and segregated as common 1 mm thick coatings on underside of rock fragments; moderately alkaline (pH 8.4).
R—16 inches; unweathered sandstone with fractures greater than 4 inches apart.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 10 to 27 percent
Rock fragment content: 35 to 90 percent sandstone channers and flagstones
Average annual soil temperature: 47 to 50 degrees F.
Depth to calcic horizon: 2 to 8 inches
Depth to lithic contact: 8 to 20 inches to sandstone bedrock
Moisture control section: is affected by precipitation that falls evenly throughout the year with a slight increase in late summer and early fall
Moisture regime: aridic bordering on ustic

A horizon:
Hue: 10YR or 2.5Y
Value: 5 to 7 dry, 4 or 5 moist
Chroma: 2 to 4 dry or moist
Texture: very channery sandy loam, very channery loam, or extremely channery sandy loam
*Rock fragment content:*15 to 75 percent channers and flagstones
Calcium carbonate equivalent: 5 to 10 percent
Reaction: moderately alkaline or strongly alkaline

Bk horizon:
Hue: 10YR or 2.5Y
Value: 5 to 7 dry, 4 to 6 moist
Chroma: 2 to 4 dry or moist
Texture: extremely channery sandy loam, very channery loam, or very channery sandy loam
Calcium carbonate equivalent: 15 to 30 percent
Rock fragment content: 35 to 90 percent channers and flagstones
Reaction: moderately alkaline or strongly alkaline

Wallson Series

Map unit(s): 208
Local phase(s): none specified
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)

Landform: hills, hillslopes
Position on landform: summits
Parent material: eolian deposits derived from sandstone
Elevation: 5,700 to 6,100 feet (1,737 to 1,859 meters)
Slope: 3 to 15 percent
Climatic data:
Mean annual precipitation: 9 to 11 inches (229 to 279 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Frost-free period: 90 to 105 days

Taxonomic class: Coarse-loamy, mixed, mesic Typic Haplargids

Typical Pedon

Map unit in which located: Wallson-Tricera complex, 3 to 15 percent slopes
Location in the survey area: about 1,000 feet north and 400 feet west of the southeast corner of sec. 15, T. 3 N., R. 104 W.

A—0 to 3 inches; pale brown (10YR 6/3) fine sandy loam, dark brown (10YR 4/3) moist; weak thick platy structure parting to weak very thin platy; slightly hard, very friable, nonsticky and nonplastic; neutral; clear smooth boundary.
BA—3 to 8 inches; yellowish brown (10YR 5/4) fine sandy loam, brown (10YR 4/3) moist; weak coarse subangular blocky structure parting to weak medium subangular blocky; slightly hard, friable, slightly sticky and slightly plastic; neutral; clear smooth boundary.
Bt1—8 to 22 inches; brown (7.5YR 5/4) fine sandy loam, dark brown (7.5YR 4/4) moist; moderate fine and medium prismatic structure parting to moderate medium and coarse subangular blocky; hard, friable, sticky and slightly plastic; few faint clay films on faces of peds; mildly alkaline; gradual smooth boundary.
Bt2—22 to 38 inches; yellowish brown (10YR 5/6) fine sandy loam, dark yellowish brown (10YR 4/6) moist; weak medium subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; few faint clay films on faces of peds; mildly alkaline; clear smooth boundary.
Bk1—38 to 48 inches; light yellowish brown (10YR 6/4) fine sandy loam, yellowish brown (10YR 5/4) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; many fine and medium irregular soft masses of calcium carbonate; strongly effervescent; moderately alkaline; gradual smooth boundary.
Bk2—48 to 55 inches; very pale brown (10YR 7/3) sandy clay loam, brown (10YR 5/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; disseminated calcium carbonate; violently effervescent; moderately alkaline; clear smooth boundary.
Bk3—55 to 60 inches; light yellowish brown (10YR 6/4) fine sandy loam, yellowish brown (10YR 5/4) moist; massive; soft, very friable, nonsticky and nonplastic; 10 percent gravel; disseminated calcium carbonate; violently effervescent; moderately alkaline.

Range in Characteristics

Depth to argillic horizon: 20 to 38 inches
Depth to secondary calcium carbonate: 25 to 38 inches
Note: Layers of sandy clay loam may be present in some pedons below a depth of 40 inches.

Bt horizon:
Hue: 10YR or 7.5YR
Texture: sandy loam or fine sandy loam

Bk horizons:
Texture: loamy sand or fine sandy loam

Waybe Series

Map unit(s): 52
Local phase(s): none specified
Depth class: shallow
Drainage class: well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Landform: mountainsides, narrow ridges
Position on landform: summits
Parent material: residuum derived from shale
Elevation: 7,200 to 8,600 feet (2,194 to 2,621 meters)
Slope: 5 to 30 percent
Climatic data:
Mean annual precipitation: 18 to 20 inches (457 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Frost-free period: 50 to 75 days

Taxonomic class: Clayey, mixed (calcareous), shallow Typic Cryorthents

Typical Pedon

Map unit in which located: Danavore-Waybe complex, 5 to 30 percent slopes
Location in the survey area: about 100 feet east and 500 feet north of the southwest corner of sec. 31, T. 4 N., R. 94 W.

A—0 to 4 inches; light gray (2.5Y 7/2) channery silty clay loam, light brownish gray (2.5Y 6/2) moist; moderate medium platy structure parting to moderate medium granular; slightly hard, friable, sticky and plastic; 20 percent channers; strongly effervescent; moderately alkaline; clear smooth boundary.

AC—4 to 9 inches; pale yellow (2.5Y 7/4) silty clay loam, light yellowish brown (2.5Y 6/4) moist; massive; slightly hard, friable, sticky and plastic; 60 percent weakly consolidated shale fragments; strongly effervescent; moderately alkaline; clear wavy boundary.

C—9 to 15 inches; pale yellow (2.5Y 7/4) silty clay loam, light yellowish brown (2.5Y 6/4) moist; platy rock structure; 75 percent weakly consolidated shale fragments; strongly effervescent; moderately alkaline; clear wavy boundary.

Cr—15 inches; weakly consolidated shale.

Range in Characteristics

Depth to paralithic contact: 10 to 20 inches

C horizon:
Texture: silty clay loam, clay loam, or clay

Weed Series

Map unit(s): 209
Local phase(s): none specified
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: alluvial fans, hills
Position on landform: toeslopes
Parent material: alluvium derived from sandstone
Elevation: 6,300 to 7,400 feet (1,920 to 2,256 meters)
Slope: 1 to 12 percent
Climatic data:
Mean annual precipitation: 13 to 15 inches (330 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine-loamy, mixed Pachic Argiborolls

Typical Pedon

Map unit in which located: Weed sandy loam, 1 to 12 percent slopes
Location in the survey area: about 1,000 feet south and 500 feet west of the northeast corner of sec. 15, T. 7 N., R. 93 W.

A1—0 to 5 inches; brown (10YR 4/3) sandy loam, very dark grayish brown (10YR 3/2) moist; weak fine granular structure; soft, very friable, nonsticky and nonplastic; neutral; clear smooth boundary.

A2—5 to 10 inches; brown (10YR 4/3) sandy loam, dark brown (10YR 3/2) moist; weak medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; neutral; gradual smooth boundary.

Bt1—10 to 18 inches; brown (10YR 5/3) sandy clay loam, dark grayish brown (10YR 3/2) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; hard, firm, sticky and plastic; few faint clay films on faces of peds; neutral; gradual smooth boundary.

Bt2—18 to 28 inches; yellowish brown (10YR 5/4) sandy clay loam, brown (10YR 4/3) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; hard, firm, sticky and plastic; few faint clay films on faces of peds; mildly alkaline; gradual smooth boundary.

Bk1—28 to 32 inches; yellowish brown (10YR 5/4) sandy clay loam, dark brown (10YR 4/3) moist; weak medium subangular blocky structure parting to weak fine subangular blocky; hard, firm, sticky and plastic; slightly effervescent; mildly alkaline; gradual smooth boundary.

Bk2—32 to 41 inches; light yellowish brown (10YR 6/4) sandy clay loam, dark brown (10YR 5/3) moist; weak medium subangular blocky structure parting to weak fine subangular blocky; hard, firm, sticky and plastic; strongly effervescent; moderately alkaline; clear smooth boundary.

Bk3—41 to 60 inches; very pale brown (10YR 7/3) sandy loam, light yellowish brown (10YR 6/4) moist; weak medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; violently effervescent; moderately alkaline.

Range in Characteristics

Depth to argillic horizon: 25 to 35 inches
Depth to secondary calcium carbonate: 25 to 35 inches

A horizon:
Reaction: neutral or mildly alkaline

Bt horizon:
Hue: 10YR or 7.5YR
Texture: sandy clay loam or clay loam
Reaction: neutral or mildly alkaline

Bk1 and Bk2 horizons:
Texture: loam or sandy clay loam

Bk3 horizons:
Texture: sandy clay loam, sandy loam, or loamy sand

Willwood Series

Map unit(s): 192, 210, 211, 212
Local phase(s): none specified
Depth class: very deep
Drainage class: excessively drained
Slowest permeability: 6.0 to 20 in./hr. (rapid)
Landform: alluvial fans, benches, terrace escarpments, fan terraces, hills
Position on landform: toeslopes
Parent material: alluvium derived from mixed sources, alluvium derived from sandstone, alluvium derived from sandstone and quartzite
Elevation: 5,300 to 6,000 feet (1,615 to 1,829 meters)
Slope: 1 to 40 percent
Climatic data:
Mean annual precipitation: 7 to 10 inches (178 to 254 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Frost-free period: 90 to 105 days

Taxonomic class: Sandy-skeletal, mixed, mesic Typic Torriorthents

Typical Pedon

Map unit in which located: Willwood-Tipperary complex, 12 to 40 percent slopes
Location in the survey area: about 100 feet north and 1,700 feet west of the southeast corner of sec. 9, T. 10 N., R. 103 W.

A1—0 to 2 inches; pale brown (10YR 6/3) very cobbly loamy fine sand, brown (10YR 4/3) moist; weak thin platy structure; soft, very friable, nonsticky and nonplastic; 25 percent gravel, 25 percent cobbles; strongly effervescent; moderately alkaline; abrupt smooth boundary.
A2—2 to 5 inches; pale brown (10YR 6/3) very gravelly loamy fine sand, brown (10YR 4/3) moist; massive; slightly hard, very friable, nonsticky and nonplastic; 40 percent gravel, 10 percent cobbles; strongly effervescent; moderately alkaline; clear smooth boundary.
Bk1—5 to 11 inches; very pale brown (10YR 7/3) very gravelly loamy fine sand, brown (10YR 5/3) moist; single grained; loose, nonsticky, and nonplastic; 40 percent gravel 20 percent cobbles; calcium carbonate pendants on the underside of many of the rock fragments; strongly effervescent; moderately alkaline; clear smooth boundary.
Bk2—11 to 34 inches; very pale brown (10YR 6/4) extremely cobbly loamy sand, brown (10YR 5/3) moist; single grained; loose, nonsticky and nonplastic; 40 percent gravel, 30 percent cobbles; calcium carbonate pendants on the underside of many of the rock fragments; strongly effervescent; moderately alkaline; clear smooth boundary.
C—34 to 60 inches; pale brown (10YR 6/3) extremely cobbly sand, brown (10YR 5/3) moist; single grained; loose, nonsticky and nonplastic; 40 percent gravel, 30 percent cobbles; strongly effervescent; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 35 to 65 percent
Note: The Willwood soil in map unit #210, Willwood-Sheppard, cool, complex, 1 to 12 percent slopes, is outside the range of the Willwood series because it has a hue of 5YR or 7.5YR in the Bk horizons.
Note: In some pedons, a 3C horizon with a texture of sand is present below a depth of 30 inches to a depth of 60 inches or more. The soil is effervescent at a depth of 0 to 2 inches. The Bk horizons are absent in some pedons.

A horizons:
Texture: very cobbly loamy fine sand or loamy sand

Bk and C horizons:
Texture: extremely cobbly sand, extremely cobbly loamy sand, very cobbly sand, very cobbly loamy fine sand, very gravelly loamy fine sand, very channery loamy fine sand, or extremely channery loamy fine sand; in some pedons, the Bk1 horizon is loamy fine sand

Windcomb Series

Map unit(s): 243
Local phase(s): none specified
Depth class: very shallow to shallow
Drainage class: well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: cuestas
Parent material: slope alluvium and/or colluvium derived from limestone over residuum weathered from sandstone and siltstone

Elevation: 5,400 to 6,400 feet (1,646 to 1,951 meters)
Slope: 3 to 25 percent
Climatic data:
Mean annual precipitation: 10 to 12 inches (254 to 305 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Frost-free period: 90 to 105 days

Taxonomic class: Loamy-skeletal, mixed, superactive, calcareous, mesic Lithic Ustic Torriorthents

Typical Pedon

Map unit in which located: Windcomb-Badland-Rock Outcrop complex, 8 to 25 percent slopes, extremely flaggy, from the Dinosaur National Monument Soil Survey
Location in the Dinosaur National Monument survey area: about 1,200 feet north and 1,500 feet east of the southwest corner of section 22, T. 3 S., R. 25 E., SLBM latitude 40 degrees, 32 minutes, 9 seconds N. and longitude 109 degrees, 6 minutes, 4 seconds W.

A—0 to 4 inches; reddish brown (2.5YR 5/4) very channery silt loam, reddish brown (2.5YR 4/4) moist; weak thin platy structure parting to weak very fine and fine subangular blocky; slightly hard, friable, slightly sticky and slightly plastic; common very fine, few fine and medium roots; many very fine, common fine, few medium tubular and interstitial pores; 10 percent gravel and 30 percent channers; calcium carbonate is disseminated; slightly effervescent; moderately alkaline; gradual wavy boundary.
C1—4 to 9 inches; reddish brown (5YR 5/4) very channery loam, reddish brown (5YR 4/4) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; common very fine, few fine, medium, and coarse roots; many very fine, few fine tubular pores; 15 percent gravel and 30 percent channers; calcium carbonate is disseminated; slightly effervescent; moderately alkaline; gradual wavy boundary.
C2—9 to 17 inches; reddish brown (5YR 5/4) very channery loam, reddish brown (5YR 4/4) moist; massive; hard, very friable, slightly sticky and slightly plastic; common very fine, fine, and medium, few coarse roots; many very fine, few fine tubular pores; 10 percent gravel and 30 percent channers; calcium carbonate is disseminated; slightly effervescent; moderately alkaline; abrupt wavy boundary.
R—17 inches; unweathered siltstone.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 10 to 18 percent
Rock fragment content: 35 to 80 percent
Depth to bedrock: 6 to 20 inches
Thickness of the ochric epipedon: 3 to 4 inches

A horizon:
Hue: 2.5YR or 5YR
Chroma: 4 or 6
Texture: very channery silt loam

C horizon:
Hue: 2.5YR or 5YR
Chroma: 4 or 6
Texture: extremely channery fine sandy loam, extremely channery very fine sandy loam, very channery loam, or extremely channery loam

Winevada Series

Map unit(s): 213, 214
Local phase(s): none specified
Depth class: moderately deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: mountainsides, plateaus
Parent material: residuum derived from sandstone
Elevation: 7,000 to 8,500 feet (2,134 to 2,591 meters)
Slope: 3 to 65 percent
Climatic data:
Mean annual precipitation: 18 to 20 inches (457 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Frost-free period: 50 to 75 days

Taxonomic class: Fine-loamy, mixed Pachic Cryoborolls

Typical Pedon

Map unit in which located: Winevada-Splitro complex, 3 to 25 percent slopes
Location in the survey area: about 1,700 feet west and 1,400 feet south of the northeast corner of sec. 12, T. 4 N., R. 91 W.

A1—0 to 10 inches; very dark grayish brown (10YR 3/2) loam, very dark brown (10YR 2/2) moist; weak fine granular structure; soft, very friable, slightly sticky and slightly plastic; neutral; clear smooth boundary.
A2—10 to 21 inches; very dark grayish brown (10YR 3/2) loam, very dark brown (10YR 2/2) moist;

weak fine granular structure and weak medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; neutral; abrupt smooth boundary.

AC—21 to 25 inches; light brownish gray (10YR 6/2) loam, dark brown (10YR 3/3) moist; weak fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; 25 percent soft sandstone fragments; neutral; abrupt smooth boundary.

R—25 inches; hard sandstone bedrock.

Range in Characteristics

Particle-size control section (weighted average):
Clay content: 18 to 27 percent
Rock fragment content: 0 to 15 percent
Depth to lithic contact: 20 to 40 inches
Thickness of the mollic epipedon: 20 to 30 inches

AC horizon:
Texture: sandy loam, sandy clay loam, or loam

Winkleman Series

Map unit(s): 215
Local phase(s): none specified
Depth class: very deep
Drainage class: moderately well drained
Slowest permeability: .06 to 0.2 in./hr. (slow)
Landform: flood plains
Parent material: alluvium derived from mixed sources
Elevation: 5,300 to 6,000 feet (1,615 to 1,829 meters)
Slope: 0 to 3 percent
Climatic data:
Mean annual precipitation: 7 to 10 inches (178 to 254 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Frost-free period: 90 to 105 days

Taxonomic class: Fine, montmorillonitic (calcareous), mesic Typic Torrifluvents

Typical Pedon

Map unit in which located: Winkleman clay loam, 0 to 3 percent slopes
Location in the survey area: about 1,000 feet north and 600 feet east of the southwest corner of sec. 30, T. 10 N., R. 102 W.

A—0 to 6 inches; grayish brown (10YR 5/2) clay loam, grayish brown (10YR 5/2) moist; weak medium subangular blocky structure parting to weak fine subangular blocky; slightly hard, friable, slightly sticky and slightly plastic; strongly effervescent; moderately alkaline; clear smooth boundary.

C1—6 to 10 inches; light gray (10YR 7/2) clay loam, grayish brown (10YR 5/2) moist; weak medium subangular blocky structure parting to weak fine subangular blocky; slightly hard, friable, slightly sticky and slightly plastic; visible seams of gypsum; strongly effervescent; moderately alkaline; clear smooth boundary.

C2—10 to 24 inches; light brownish gray (2.5Y 6/2) clay loam, grayish brown (10YR 5/2) moist; massive; hard, friable, slightly sticky and plastic; visible seams of gypsum; strongly effervescent; strongly alkaline; clear smooth boundary.

C3—24 to 28 inches; light gray (2.5Y 7/2) loam, grayish brown (2.5Y 5/2) moist; massive; soft, very friable, slightly sticky and slightly plastic; strongly effervescent; strongly alkaline; clear smooth boundary.

C4—28 to 34 inches; light gray (2.5Y 7/2) clay loam, grayish brown (10YR 5/2) moist; massive; slightly hard, friable, slightly sticky and plastic; strongly effervescent; strongly alkaline; clear smooth boundary.

C5—34 to 60 inches; light gray (2.5Y 7/2) clay loam, grayish brown (10YR 5/2) moist; common fine distinct yellowish brown (10YR 5/8) and common medium distinct gray (10YR 6/1) mottles; massive; slightly hard, friable, slightly sticky and plastic; strongly effervescent; strongly alkaline.

Range in Characteristics

Depth to effervescence: throughout
Depth to a seasonal high water table: 2 1/2 to 4 feet

C horizons:
Hue: 10YR or 2.5Y
Texture: clay loam, silty clay loam, silty clay, or clay with a few thin strata of silt loam or loam
Clay content: greater than 35 percent
Reaction: moderately alkaline or strongly alkaline

Yamo Series

Map unit(s): 68, 91, 113, 216, 217
Local phase(s): none specified
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: benches, hills, hillslopes
Position on landform: summits, footslopes, toeslopes
Parent material: alluvium derived from sandstone, alluvium derived from sandstone and in loess, loess, loess and in residuum derived from

sandstone, residuum derived from sandstone and in loess
Elevation: 6,100 to 7,200 feet (1,859 to 2,195 meters)
Slope: 3 to 30 percent
Climatic data:
Mean annual precipitation: 11 to 15 inches (279 to 381 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Fine-loamy, mixed Borollic Camborthids

Typical Pedon

Map unit in which located: Kemmerer-Yamo complex, 5 to 30 percent slopes
Location in the survey area: about 500 feet west and 1,000 feet south of the northeast corner of sec. 18, T. 4 N., R. 93 W.

A—0 to 5 inches; pale brown (10YR 6/3) loam, brown (10YR 5/3) moist; weak fine granular structure; slightly hard, very friable, sticky and plastic; strongly effervescent; moderately alkaline; clear smooth boundary.
Bw—5 to 15 inches; pale brown (10YR 6/3) loam, light olive brown (2.5Y 5/4) moist; moderate medium subangular blocky structure; hard, friable, sticky and plastic; strongly effervescent; moderately alkaline; gradual wavy boundary.
Bk1—15 to 22 inches; pale brown (10YR 6/3) loam, light olive brown (2.5Y 5/4) moist; weak medium subangular blocky structure; hard, friable, sticky and plastic; many fine concentrations of calcium carbonate; strongly effervescent; moderately alkaline; clear smooth boundary.
Bk2—22 to 38 inches; very pale brown (10YR 7/3) loam, light olive brown (2.5Y 5/4) moist; weak medium subangular blocky structure; slightly hard, friable, sticky and plastic; many fine concentrations of calcium carbonate; strongly effervescent; moderately alkaline; clear smooth boundary.
Bk3—38 to 60 inches; very pale brown (10YR 7/3) loam, light olive brown (2.5Y 5/4) moist; weak coarse subangular blocky structure; hard, friable, sticky and plastic; common fine concentrations of calcium carbonate; strongly effervescent; moderately alkaline.

Range in Characteristics

Depth to secondary calcium carbonate: 10 to 20 inches
Hue: 7.5YR to 2.5Y
B horizons:
Texture: loam, sandy clay loam, or clay loam

Yampa Series

Map unit(s): 233, 249
Local phase(s): none specified
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: fan remnants, mountains, structural benches
Position on landform: backslopes
Parent material: colluvium and/or mixed calcareous source residuum, mixed calcareous source alluvium and/or colluvium and/or residuum
Elevation: 6,000 to 8,000 feet (1,829 to 2,438 meters)
Slope: 5 to 65 percent
Climatic data:
Mean annual precipitation: 12 to 18 inches (305 to 457 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Loamy-skeletal, mixed, superactive, frigid Haplocalcidic Ustochrepts

Typical Pedon

Map unit in which located: Lakebench-Yampa complex, 5 to 30 percent slopes, very stony, from the Dinosaur National Monument Soil Survey
Location in the Dinosaur National Monument survey area: about 1,300 feet west and 800 feet south of the northeast corner of section 30, T. 6 N., R. 100 W., NMPM latitude 40 degrees, 26 minutes, 48 seconds N. and longitude 108 degrees, 40 minutes, 4 seconds W.

The soil surface is covered with limestone rock fragments, consisting of 15 percent gravel, 10 percent cobbles, and 1 percent stones.

A—0 to 7 inches; brown (7.5YR 4/3) very cobbly loam, dark brown (7.5YR 3/4) moist; weak fine subangular blocky structure parting to moderate fine granular; soft, very friable, slightly sticky and slightly plastic; many very fine and fine, common medium roots; few very fine tubular pores; 25 percent gravel and 20 percent cobbles; common fine irregular soft masses of calcium carbonate throughout; strongly effervescent; 19 percent calcium carbonate equivalent; moderately alkaline; clear smooth boundary.

Bk1—7 to 13 inches; pinkish gray (7.5YR 7/2) extremely gravelly loam, light brown (7.5YR 6/3) moist; weak fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine, many medium and coarse roots; few very fine tubular pores; 50 percent gravel and 15 percent cobbles; many medium and coarse irregular soft masses of calcium carbonate throughout; violently effervescent; 33 percent calcium carbonate equivalent; strongly alkaline; clear smooth boundary.

Bk2—13 to 31 inches; pinkish white (7.5YR 8/2) very cobbly loam, pink (7.5YR 7/3) moist; weak fine and medium subangular blocky structure; slightly hard, friable, sticky and plastic; few fine and medium roots; common very fine tubular pores; 25 percent gravel and 20 percent cobbles; many medium and coarse irregular soft masses of calcium carbonate throughout; violently effervescent; 39 percent calcium carbonate equivalent; strongly alkaline; gradual smooth boundary.

Bk3—31 to 60 inches; light reddish brown (5YR 6/3) extremely cobbly sandy loam, reddish brown (5YR 5/4) moist; massive; slightly hard, friable, nonsticky and slightly plastic; few fine roots; few very fine tubular pores; 45 percent gravel, 30 percent cobbles, and 5 percent stones; many fine and medium irregular soft masses of calcium carbonate throughout; violently effervescent; 24 percent calcium carbonate equivalent; strongly alkaline.

Range in Characteristics

Particle-size control section (weighted average):
- *Clay content:* 5 to 35 percent
- *Rock fragment content:* 35 to 80 percent
- *Calcium carbonate equivalent:* 15 to 40 percent

Depth to calcic horizon: 4 to 7 inches
Depth to secondary carbonates: 0 to 10 inches

A horizon:
- *Hue:* 5YR or 7.5YR
- *Value:* 4 or 5 dry, 2 or 3 moist
- *Chroma:* 2 to 4
- *Texture:* gravelly loam or very cobbly loam
- *Reaction:* slightly alkaline or moderately alkaline

Bk horizons:
- *Hue:* 5YR or 7.5YR
- *Value:* 5 to 8 dry, 5 to 7 moist
- *Chroma:* 2 to 6
- *Texture:* loam or clay loam in the upper part; loamy sand or sandy loam in the lower part, modified by 35 to 80 percent gravel or cobbles
- *Reaction:* moderately alkaline or strongly alkaline

Yellowwash Series

Map unit(s): 218
Local phase(s): none specified
Depth class: very shallow to shallow
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: hillslopes
Parent material: residuum derived from siltstone
Elevation: 6,800 to 7,700 feet (2,073 to 2,347 meters)
Slope: 5 to 15 percent
Climatic data:
- *Mean annual precipitation:* 11 to 13 inches (279 to 330 millimeters)
- *Mean annual air temperature:* 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
- *Frost-free period:* 75 to 95 days

Taxonomic class: Loamy, mixed (calcareous), frigid Lithic Ustic Torriorthents

Typical Pedon

Map unit in which located: Yellowwash-Piezon complex, 5 to 15 percent slopes
Location in the survey area: about 800 feet west and 2,000 feet south of the northeast corner of sec. 18, T. 10 N., R. 99 W.

A—0 to 2 inches; pale brown (10YR 6/3) channery loam, brown (10YR 4/3) moist; weak fine platy structure parting to weak fine subangular blocky; slightly hard, friable, sticky and plastic; 30 percent channers; strongly effervescent; moderately alkaline; clear smooth boundary.

AC—2 to 10 inches; light yellowish brown (10YR 6/4) channery loam, dark yellowish brown (10YR 4/4) moist; weak medium subangular blocky structure; slightly hard, friable, sticky and plastic; 30 percent channers; strongly effervescent; moderately alkaline; clear smooth boundary.

R—10 inches; hard siltstone.

Range in Characteristics

Particle-size control section (weighted average):
- *Clay content:* 20 to 27 percent
- *Rock fragment content:* 10 to 35 percent channery fragments

Depth to effervescence: throughout
Depth to lithic contact: 7 to 20 inches
Hue: 2.5Y or 10YR

AC horizon:
Texture: loam or channery loam

Youga Series

Map unit(s): 35, 84, 137, 219, 220, 221
Local phase(s): moist
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: mountainsides, plateaus, concave and planar slopes on plateaus
Position on landform: summits, backslopes, footslopes
Parent material: alluvium and residuum derived from sandstone, alluvium derived from sandstone, colluvium derived from basalt and sandstone, residuum and colluvium derived from sandstone, residuum derived from sandstone
Elevation: 7,000 to 8,600 feet (2,134 to 2,621 meters)
Slope: 3 to 45 percent
Climatic data:
Mean annual precipitation: 16 to 20 inches (406 to 508 millimeters)
Mean annual air temperature: 37 to 40 degrees F. (2.8 to 4.4 degrees C.)
Frost-free period: 50 to 75 days

Taxonomic class: Fine-loamy, mixed Argic Cryoborolls

Typical Pedon

Map unit in which located: Clayburn-Youga, moist, complex, 15 to 45 percent slopes
Location in the survey area: about 2,300 feet west and 1,200 feet south of the northeast corner of sec. 14, T. 4 N., R. 91 W.

Oi—0 to 1 inch; slightly decomposed leaves and twigs.
A1—1 inch to 7 inches; very dark gray (10YR 3/1) loam, black (10YR 2/1) moist; weak medium granular structure parting to weak fine granular; soft, very friable, slightly sticky and nonplastic; 5 percent gravel; slightly acid; abrupt smooth boundary.
A2—7 to 14 inches; very dark gray (10YR 3/1) loam, black (10YR 2/1) moist; weak coarse subangular blocky structure parting to weak fine subangular blocky; soft, very friable, slightly sticky and nonplastic; 5 percent gravel; slightly acid; abrupt smooth boundary.
Bt1—14 to 24 inches; brown (7.5YR 5/4) clay loam, dark brown (7.5YR 4/4) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; hard, firm, sticky and plastic; many faint clay films on faces of peds; 10 percent gravel; slightly acid; gradual smooth boundary.
Bt2—24 to 40 inches; light brown (7.5YR 6/4) clay loam, brown (7.5YR 5/4) moist; moderate medium subangular blocky structure parting to moderate fine subangular blocky; hard, firm, sticky and plastic; many faint clay films on faces of peds; 10 percent gravel; slightly acid; gradual smooth boundary.
BC—40 to 48 inches; pinkish white (7.5YR 8/2) sandy clay loam, light brown (7.5YR 6/4) moist; weak medium subangular blocky structure; hard, firm, sticky and slightly plastic; 5 percent gravel; slightly acid; gradual smooth boundary.
C—48 to 60 inches; pinkish white (7.5YR 8/2) sandy clay loam, light brown (7.5YR 6/4) moist; massive; hard, firm, slightly sticky and slightly plastic; 5 percent gravel; slightly acid.

Range in Characteristics

Particle-size control section (weighted average):
Rock fragment content: 0 to 15 percent
Clay content: 14 to 30 percent
Depth to argillic horizon: 30 to 50 inches
Thickness of the mollic epipedon: 10 to 15 inches

Bt horizons:
Hue: 10YR or 7.5YR
Texture: sandy clay loam or clay loam
Reaction: slightly acid or neutral

Bk horizon: (present below a depth of 40 inches in some pedons)
Hue: 10YR or 2.5Y

C horizon:
Hue: 10YR or 7.5YR
Texture: sandy clay loam, fine sandy loam, or sandy loam
Reaction: slightly acid to mildly alkaline

Youngston Series

Map unit(s): 126, 222, 223
Local phase(s): moist, cool, well drained
Depth class: very deep
Drainage class: well drained, moderately well drained

Slowest permeability: 0.2 to 0.6 in./hr. (moderately slow)
Landform: flood plains, terraces
Parent material: alluvium derived from mixed sources
Elevation: 5,300 to 6,300 feet (1,615 to 1,920 meters)
Slope: 0 to 3 percent
Climatic data:
Mean annual precipitation: 7 to 11 inches (178 to 279 millimeters)
Mean annual air temperature: 45 to 48 degrees F. (7.2 to 8.9 degrees C.)
Frost-free period: 90 to 105 days

Taxonomic class: Fine-loamy, mixed (calcareous), mesic Typic Torrifluvents

Typical Pedon

Map unit in which located: Youngston loam, cool, 0 to 3 percent slopes
Location in the survey area: about 100 feet north and 550 feet east of the southwest corner of sec. 19, T. 10 N., R. 102 W.

A1—0 to 5 inches; pale brown (10YR 6/3) loam, dark grayish brown (10YR 4/2) moist; weak medium granular structure parting to weak fine granular; soft, friable, slightly sticky and slightly plastic; strongly effervescent; moderately alkaline; abrupt smooth boundary.
A2—5 to 9 inches; pale brown (10YR 6/3) loam, dark grayish brown (10YR 4/2) moist; weak moderate granular structure; soft, friable, slightly sticky and slightly plastic; strongly effervescent; moderately alkaline; clear smooth boundary.
C1—9 to 18 inches; pale brown (10YR 6/3) loam, dark grayish brown (10YR 4/2) moist; massive; soft, friable, slightly sticky and slightly plastic; moderately alkaline; abrupt smooth boundary.
C2—18 to 23 inches; brown (10YR 5/3) silt loam, dark brown (10YR 4/3) moist; massive; soft, friable, slightly sticky and slightly plastic; strongly effervescent; moderately alkaline; clear smooth boundary.
C3—23 to 31 inches; pale brown (10YR 6/3) loam, dark grayish brown (2.5Y 4/2) moist; massive; soft, friable, slightly sticky and slightly plastic; strongly effervescent; strongly alkaline; abrupt smooth boundary.
C4—31 to 52 inches; brown (10YR 5/3) clay loam, dark grayish brown (10YR 4/2) moist; massive; slightly hard, friable, slightly sticky and plastic; strongly effervescent; strongly alkaline; clear smooth boundary.
C5—52 to 60 inches; brown (10YR 5/3) clay loam, dark grayish brown (10YR 4/2) moist; common fine distinct (10YR 5/6) mottles; massive; slightly hard, friable, slightly sticky and plastic; strongly effervescent; strongly alkaline.

Range in Characteristics

Depth to a seasonal high water table: 4 feet or more in April and May

C horizons:
Hue: 10YR or 2.5Y
Texture: loam, clay loam, or silt loam with a few thin lenses of sandy loam
Reaction: moderately alkaline or strongly alkaline

Zillion Series

Map unit(s): 224, 249
Depth class: very deep
Drainage class: well drained
Slowest permeability: 0.6 to 2.0 in./hr. (moderate)
Landform: mountains, concave areas on mountainsides
Position on landform: backslopes
Parent material: colluvium derived from limestone and sandstone
Elevation: 7,000 to 8,000 feet (2,134 to 2,438 meters)
Slope: 25 to 65 percent
Climatic data:
Mean annual precipitation: 14 to 18 inches (356 to 457 millimeters)
Mean annual air temperature: 42 to 45 degrees F. (5.6 to 7.2 degrees C.)
Frost-free period: 75 to 95 days

Taxonomic class: Loamy-skeletal, mixed Pachic Argiborolls

Typical Pedon

Map unit in which located: Zillion-Barkelew, moist-Grapit complex, 25 to 65 percent slopes, extremely stony
Location in the survey area: about 1,000 feet north and 300 feet east of the southwest corner of sec. 2, T. 7 N., R. 102 W.

A—0 to 7 inches; dark brown (10YR 3/3) loam, very dark grayish brown (10YR 3/2) moist; weak medium granular structure; soft, very friable, slightly sticky and slightly plastic; 5 percent gravel; mildly alkaline; clear smooth boundary.
AB—7 to 18 inches; dark brown (10YR 4/3) cobbly loam, very dark grayish brown (10YR 3/2) moist; weak medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; 15

percent gravel, 10 percent cobbles; mildly alkaline; clear smooth boundary.

Bt—18 to 26 inches; yellowish brown (10YR 5/4) very cobbly loam, dark brown (10YR 4/3) moist; moderate medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; 20 percent gravel, 15 percent cobbles; common faint clay films on faces of peds; mildly alkaline; clear wavy boundary.

Btk—26 to 34 inches; light brown (7.5YR 6/4) very cobbly sandy clay loam, brown (7.5YR 5/4) moist; weak medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; common faint clay films on faces of peds; 30 percent gravel, 20 percent cobbles; 16 percent calcium carbonate equivalent; strongly effervescent; moderately alkaline; clear wavy boundary.

Bk1—34 to 45 inches; pink (7.5YR 7/4) extremely cobbly sandy clay loam, light brown (7.5YR 6/4) moist; massive; soft, very friable, slightly sticky and slightly plastic; 30 percent cobbles, 25 percent gravel, 10 percent stones; 35 percent calcium carbonate equivalent; violently effervescent; moderately alkaline; gradual wavy boundary.

Bk2—45 to 60 inches; white (7.5YR 8/1) extremely cobbly sandy clay loam, pink (7.5YR 7/4) moist; massive; soft, very friable, slightly sticky and slightly plastic; 35 percent cobbles, 25 percent gravel, 15 percent stones; 40 percent calcium carbonate equivalent; moderately alkaline.

Range in Characteristics

Particle-size control section (weighted average):
- *Clay content:* 20 to 30 percent
- *Rock fragment content:* 35 to 50 percent
- *Calcium carbonate equivalent:* 20 to 40 percent
- *Depth to secondary calcium carbonate:* 20 to 32 inches

Bt horizons:
- *Hue:* 10YR or 7.5YR
- *Texture:* very cobbly loam or very cobbly sandy clay loam
- *Note:* This soil is outside the range of the Zillion series because it has a texture of sandy clay loam with 22 to 32 percent clay in the Bt horizons.

Bk horizons:
- *Hue:* 10YR or 7.5YR
- *Texture:* extremely cobbly sandy clay loam or very cobbly sandy clay loam
- *Rock fragment content:* 50 to 75 percent

Formation of the soils

The characteristics of any given soil are determined by the interaction of the five factors of soil formation: the physical and mineralogical composition of the parent material; the climate under which the soil material accumulated and weathered; the plant and animal life on and in the soil; topography of the terrain; and the length of time that the forces of soil formation have acted upon the soil material.

Climate, plant, and animal life are the active factors of soil formation. These factors act upon the parent material that has accumulated through the weathering of rock or that has been deposited by wind and water and slowly changed it into a natural body that has genetically related horizons. The effects of climate, plant, and animal life are conditioned by topography of the terrain. The kind of parent material also affects the kind of profile that is formed and, in extreme cases, determines it almost entirely. Finally, time is needed to change the parent material into soil that has distinct horizons.

The factors of soil formation are so closely interrelated in their effects on the soil that few generalizations can be made regarding the effect of any one factor unless conditions are specific for the other four. The factors of soil formation are not equal in their effect on soil formation, nor is any one factor equal under different conditions. In some places any one factor may have a major influence on soil formation, while in another place it may be of little importance. For example, in areas on sandhills that are subject to semi-arid climatic conditions, relief has little effect and parent material has a prominent effect on soil formation. As a result of these varying factors in the survey area, many different kinds of soils have formed. The paragraphs that follow describe the factors and processes of soil formation as they are related to the soils of the survey area.

Climate

The climate of the survey area is highly diverse. The average annual precipitation ranges from 7 to 22 inches. The average annual air temperature ranges from 37 to 45 degrees F. In the survey area, climate noticeably influences the kinds and amounts of vegetation growing on soils. It also influences the level of biological activity in soils, and the physical and chemical characteristics of the soils.

Of the climatic factors, precipitation is the one that has the greatest effect on the variation of soils in the survey area. Most of the soils in areas of low precipitation contain salts throughout the profile, have little or no clay illuviation, and are low in organic matter. These characteristics are the result of a slow leaching process and high erosion rates due to low amounts of vegetative cover. Soils in the higher precipitation areas generally have little or no salts in some or all of the soil horizons, have a zone of clay accumulation, and have a higher organic matter content. Higher amounts of vegetative cover, lower erosion rates, and a more rapid leaching process combine to promote these soil characteristics. The Chroder soil is an example of a soil receiving 8 inches of precipitation, and the Foidel soil is an example of a soil receiving 19 inches of precipitation.

Because of relatively cool soil temperatures in the survey area, biological and chemical processes occur relatively slowly in the soils. Soil temperatures decrease as elevation increases. Decomposition of organic matter and the weathering of minerals is slow. Soils at high elevations under grass, Gamble's oak, or aspen vegetation have surface horizons that are 15 to 25 inches thick and contain 4 to 10 percent organic matter. These thick, organic-rich surfaces are not only the results of slow organic decomposition, but also of high organic matter production due to favorable moisture conditions. For example, the Foidel soil has organic-rich surface horizons that contain 4 to 10 percent organic matter and are 16 to 25 inches thick. In comparison the Chroder soil, with a warmer soil temperature and lower precipitation, has a surface horizon 3 inches thick with about 1 percent organic matter.

Because weathering of minerals is slow, the soils in the survey area have high to moderate amounts of highly weatherable minerals. The rate of weathering is reduced due to long periods of low soil moisture in the locations of the survey area with low precipitation. This slow weathering rate also results in thin soils, when formed in residuum derived from bedrock, and

in a slow breakdown of rock fragments in the soil profile.

Living Organisms

Plants, burrowing animals, earthworms, and microorganisms are the living organisms that contribute most to soil development. Of these, plants are the ones that exhibit the most obvious influence on soil development. Microorganism activity also influences the development of soil characteristics, but the effects are less obvious.

The amount, and to a lesser degree, the kind of plants growing on the soils in the survey area have influenced the soil characteristics. In areas with higher precipitation, a high production of vegetative growth has resulted in thick A horizons high in organic matter. This vegetative growth has reduced erosion on these soils. High organic matter contents have promoted abundant earthworm populations, which accelerate the mixing of organic matter into the deeper soil horizons. Decomposition of the organic matter into lumic acids promotes conditions favorable for weathering and eluvial processes. These processes are evident in the Foidel soil, which has formed a stable landscape.

In areas of lower precipitation, vegetative growth is less dense and this results in higher erosion rates and a lower production of organic matter. Higher erosion rates have resulted in soils with salts nearer the surface and little accumulation of organic matter in the surface horizon.

In the driest areas, these soils support deep-rooting shrubs such as greasewood and saltbush, which remove salts from lower soil horizons and redeposit them at the soil surface where they accumulate with dead plant material.

Burrowing animals, such as ground squirrels and prairie dogs, are abundant on drier and warmer soils such as the Massadona soils. This results in the mixing of the soil profiles and destroys or inhibits development of genetic soil horizons. In more moist soils, moles are responsible for the mixing of surface horizons. This can be seen in soils under aspen stands, which tend to attract moles.

Cool soil temperatures and/or low soil moisture conditions inhibit microorganism activity. Dry summer soil conditions inhibit microorganism activity when the soil temperature is most favorable. At higher elevations, favorable soil temperatures exist for only a short period of time. These varying conditions result in slow decomposition of organic compounds by microorganisms.

Topography

Slope, aspect, and position on the landscape are major factors contributing to soil formation in the survey area. These elements change rapidly within short distances, and the magnitude of change can be large.

The lower elevations in the survey area consist mainly of toeslopes, footslopes, backslopes, plateaus, and some stream and river terraces. The higher elevations consist mainly of narrow to broad plateaus flanked by steeply sloping backslopes and footslopes. Elevation changes in these mountainous areas are in many hundreds of feet.

The slope and the position of the landscape are closely related. The lesser sloping areas are the toeslopes, some footslopes, plateaus, and terraces.

In areas where the toeslopes are receiving only small amounts of sediment and moderate amounts of precipitation, argillic horizons usually are present. Soils on the footslopes in these areas commonly have only a cambic horizon, but will occasionally have an argillic horizon. Mollic epipedons will usually be present in soils on toeslopes if the precipitation is greater than 14 inches.

In areas of lower precipitation, the soils on toeslopes usually do not have any genetic horizons or have only a cambic horizon. This is due either to continual sediment deposition-erosional cycles or to the parent materials containing considerable amounts of calcium carbonate. The soils on the footslopes in these areas commonly are moderately deep to bedrock and usually have no genetic soil horizons. These soils also have thin surface layers that are low in organic matter.

The backslopes in the low precipitation areas usually do not have any genetic soil horizons and commonly are shallow to moderately deep to bedrock. Surface layers are very thin and very low in organic matter.

The backslopes in the higher precipitation areas usually are moderately deep or deep if the aspect is east or north, and shallow or moderately deep if the aspect is south or west. The soils on the northern and eastern aspects have a cambic or argillic horizon. Where the precipitation is greater than 16 inches, the soils usually will have a mollic epipedon. The soils on the southern and western aspects usually have either a cambic horizon, or have no genetic soil horizons and lack a mollic epipedon.

The soils on the plateaus commonly have an argillic horizon unless they formed in residuum from bedrock and are shallow or moderately deep to

bedrock, or if they formed in parent materials very high in calcium carbonate. Soils such as Castee and Avalon are on plateaus or benches and contain 25 to 40 percent calcium carbonate equivalents that have accumulated in the subsoil horizons.

The Forelle and the Cochetopa soils on plateaus have well developed argillic horizons. The Cochetopa soil receives 19 inches of precipitation and has a mollic epipedon.

Parent Material

The dominant geologic types in the survey area are sandstone, shale, siltstone, limestone, river alluvium, and loess and eolian deposits. The geologic type affects the texture, salt content, depth, color, and many other properties of the soils in the survey area.

The soils derived from sandstone usually are moderately coarse or coarse textured. When the sandstone is strongly indurated, the soils commonly will contain many rock fragments. These soils contain small amounts of salts, or contain no salts, depending upon the type of sandstone formation. The color of the soils generally ranges from yellowish to reddish. When the soils are formed in residuum derived from sandstone, they commonly are shallow or moderately deep.

Where the precipitation is greater than 11 inches, cambic and argillic horizons commonly have developed in the soils formed in the alluvium or colluvium derived from all the sedimentary geologic types except limestone. In areas of low precipitation, very few soils formed in residuum of the sedimentary geologic types have cambic or argillic horizons. In areas of higher precipitation, cambic and argillic horizons have developed in soils formed in residuum derived from sedimentary geologic types.

Landscape position, slope, susceptibility to erosion, and precipitation are factors which also have influenced the degree of soil development present in the soils of the survey area. In turn, the geologic types of the survey area have influenced the types of landscapes, slope, and susceptibility to erosion.

Soils derived from shale usually are moderately fine or fine textured. These soils contain appreciable amounts of calcium sulfate, calcium carbonate, and sodium salts. The color of these soils usually is yellowish. When soils are formed in residuum derived from shale, they usually are shallow to moderately deep.

Soils derived from siltstone usually are medium textured. These soils contain appreciable amounts of calcium sulfate, calcium carbonate, and sodium salts. The color of these soils usually is yellowish. When soils are formed in residuum derived from siltstone, they usually are shallow or moderately deep.

Soils derived from limestone usually are medium textured and contain high amounts of calcium carbonate. These soils commonly contain many rock fragments. The color of the soils usually is pale yellow or white. When soils are formed in residuum derived from limestone, they typically are shallow.

Soils formed in alluvial deposits of rivers range from coarse to moderately fine textured. They are highly stratified, with the strata varying widely in texture. These soils are moderately well drained, with the depth to the seasonal high water table dependent on the level of the water in the river. The color of these soils usually is yellowish or brownish. All of these soils are very deep. These soils commonly contain only small amounts of calcium sulfate, calcium carbonate, and sodium salts; some areas, however, do contain high amounts of salts.

Soils formed in loess usually are moderately fine textured. All of these soils have a subsoil layer in which calcium carbonate has accumulated. The calcium carbonate equivalent in this layer ranges from 5 to 40 percent. The depth to the depositional layer and calcium carbonate content depends upon the stability of the landscape and the amount of precipitation the soil receives. These soils usually are very deep. The colors of these soils range from brownish to white.

Soils formed in eolian deposits usually are coarse and moderately coarse textured. These soils contain only small or no amounts of salts. The source of the eolian deposits is either a nearby river or an area with sandstone geology. The color of these soils typically is brownish or yellowish. These soils commonly are very deep. B horizons are common if the soils are moderately coarse textured and the landscapes are stable.

Time

The age of the soils in the survey area has a direct relationship to the landscape position upon which they occur. It is not always possible to determine the ages of different soils in the survey area by comparing the presence or absence of genetic soil horizons. The other factors of soil formation greatly influence the development of these horizons, and these factors can change rapidly within short distances.

By comparing landscape positions to determine soil age, it is possible to determine the relative age of most of the soils. Soils like Cowestglen, which occur on flood plains, are among the youngest soils and exhibit very little evidence of soil genesis. Soils like Forelle, which occur on the benches and plateaus, are among the oldest soils in the survey area and have an appreciable amount of organic matter in the surface layer, an argillic horizon, and a zone of calcium carbonate accumulation. Soils like Castee, which also occur on plateaus and are as old as the Forelle soils, lack an argillic horizon but have strong calcic horizons. The high calcium carbonate content of the parent material of Castee soil has inhibited the formation of an argillic horizon.

In the driest regions of the survey area, geologic erosion and subsequent deposition is occurring rapidly over much of the areas. Consequently, many of the soils are very young and only a few protected plateaus have soils that are much older. The Langspring soil is one of these older soils. Within these regions, the soils of the backslopes, footslopes, and toeslopes exhibit very little differences in the soil characteristics that are the result of soil genesis. The major difference in the soils on these hillslope positions is depth to bedrock, which is directly related to the erosional or depositional characteristics of the landscape position and not the result of differences in age.

In the more moist regions of the survey area, the geologic erosion occurs at a slower rate and subsequent deposition is occurring slowly over much of the area. Consequently, many of the soils have developed genetic soil horizons. Within these regions, the majority of the soils are moderately deep to very deep.

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Glossary

Aeration, soil. The exchange of air in soil with air from the atmosphere. The air in a well aerated soil is similar to that in the atmosphere; the air in a poorly aerated soil is considerably higher in carbon dioxide and lower in oxygen.

Aggregate, soil. Many fine particles held in a single mass or cluster. Natural soil aggregates, such as granules, blocks, or prisms, are called peds. Clods are aggregates produced by tillage or logging.

Alkali (sodic) soil. A soil having so high a degree of alkalinity (pH 8.5 or higher) or so high a percentage of exchangeable sodium (15 percent or more of the total exchangeable bases), or both, that plant growth is restricted.

Alluvial cone. The material washed down the sides of mountains and hills by ephemeral streams and deposited at the mouth of gorges in the form of a moderately steep, conical mass descending equally in all directions from the point of issue.

Alluvial fan. The fanlike deposit of a stream where it issues from a gorge upon a plain or of a tributary stream near or at its junction with its main stream.

Alluvium. Material, such as sand, silt, or clay, deposited on land by streams.

Alpha,alpha-dipyridyl. A dye that when dissolved in 1N ammonium acetate is used to detect the presence of reduced iron (Fe II) in the soil. A positive reaction indicates a type of redoximorphic feature.

Animal unit month (AUM). The amount of forage required by one mature cow of approximately 1,000 pounds weight, with or without a calf, for one month.

Aquic conditions. Current soil wetness characterized by saturation, reduction, and redoximorphic features.

Argillic horizon. A subsoil horizon characterized by an accumulation of illuvial clay.

Arroyo. The flat-floored channel of an ephemeral stream, commonly with very steep to vertical banks cut in alluvium.

Aspect. The direction in which a slope faces.

Association, soil. A group of soils or miscellaneous areas geographically associated in a characteristic repeating pattern and defined and delineated as a single map unit.

Available water capacity (available moisture capacity). The capacity of soils to hold water available for use by most plants. It is commonly defined as the difference between the amount of soil water at field moisture capacity and the amount at wilting point. It is commonly expressed as inches of water per inch of soil. The capacity, in inches, in a 60-inch profile or to a limiting layer is expressed as:

Very low	0 to 3
Low	3 to 6
Moderate	6 to 9
High	9 to 12
Very high	more than 12

Backslope. The position that forms the steepest and generally linear, middle portion of a hillslope. In profile, backslopes are commonly bounded by a convex shoulder above and a concave footslope below.

Badland. Steep or very steep, commonly nonstony, barren land dissected by many intermittent drainage channels. Badland is most common in semiarid and arid regions where streams are entrenched in soft geologic material. Local relief generally ranges from 25 to 500 feet. Runoff potential is very high, and geologic erosion is active.

Bajada. A broad alluvial slope extending from the base of a mountain range out into a basin and formed by coalescence of separate alluvial fans.

Basal area. The area of a cross section of a tree, generally referring to the section at breast height and measured outside the bark. It is a measure of stand density, commonly expressed in square feet.

Base saturation. The degree to which material having cation-exchange properties is saturated with exchangeable bases (sum of Ca, Mg, Na,

and K), expressed as a percentage of the total cation-exchange capacity.

Base slope. A geomorphic component of hills consisting of the concave to linear (perpendicular to the contour) slope that, regardless of the lateral shape, forms an apron or wedge at the bottom of a hillside dominated by colluvium and slope-wash sediments (for example, slope alluvium).

Bedding planes. Fine strata, less than 5 millimeters thick, in unconsolidated alluvial, eolian, lacustrine, or marine sediment.

Bedding system. A drainage system made by plowing, grading, or otherwise shaping the surface of a flat field. It consists of a series of low ridges separated by shallow, parallel dead furrows.

Bedrock. The solid rock that underlies the soil and other unconsolidated material or that is exposed at the surface.

Bedrock-controlled topography. A landscape where the configuration and relief of the landforms are determined or strongly influenced by the underlying bedrock.

Bench terrace. A raised, level or nearly level strip of earth constructed on or nearly on a contour, supported by a barrier of rocks or similar material, and designed to make the soil suitable for tillage and to prevent accelerated erosion.

Bisequum. Two sequences of soil horizons, each of which consists of an illuvial horizon and the overlying eluvial horizons.

Blowout. A shallow depression from which all or most of the soil material has been removed by the wind. A blowout has a flat or irregular floor formed by a resistant layer or by an accumulation of pebbles or cobbles. In some blowouts the water table is exposed.

Bottom land. The normal flood plain of a stream, subject to flooding.

Boulders. Rock fragments larger than 2 feet (60 centimeters) in diameter.

Breaks. The steep and very steep broken land at the border of an upland summit that is dissected by ravines.

Breast height. An average height of 4.5 feet above the ground surface; the point on a tree where diameter measurements are ordinarily taken.

Brush management. Use of mechanical, chemical, or biological methods to make conditions favorable for reseeding or to reduce or eliminate competition from woody vegetation and thus allow understory grasses and forbs to recover. Brush management increases forage production and thus reduces the hazard of erosion. It can improve the habitat for some species of wildlife.

Butte. An isolated small mountain or hill with steep or precipitous sides and a top variously flat, rounded, or pointed that may be a residual mass isolated by erosion or an exposed volcanic neck.

Cable yarding. A method of moving felled trees to a nearby central area for transport to a processing facility. Most cable yarding systems involve use of a drum, a pole, and wire cables in an arrangement similar to that of a rod and reel used for fishing. To reduce friction and soil disturbance, felled trees generally are reeled in while one end is lifted or the entire log is suspended.

Calcareous soil. A soil containing enough calcium carbonate (commonly combined with magnesium carbonate) to effervesce visibly when treated with cold, dilute hydrochloric acid.

Caliche. A more or less cemented deposit of calcium carbonate in soils of warm-temperate, subhumid to arid areas. Caliche occurs as soft, thin layers in the soil or as hard, thick beds directly beneath the solum, or it is exposed at the surface by erosion.

California bearing ratio (CBR). The load-supporting capacity of a soil as compared to that of standard crushed limestone, expressed as a ratio. First standardized in California. A soil having a CBR of 16 supports 16 percent of the load that would be supported by standard crushed limestone, per unit area, with the same degree of distortion.

Canopy. The leafy crown of trees or shrubs. (See Crown.)

Canyon. A long, deep, narrow, very steep sided valley with high, precipitous walls in an area of high local relief.

Capillary water. Water held as a film around soil particles and in tiny spaces between particles. Surface tension is the adhesive force that holds capillary water in the soil.

Catena. A sequence, or "chain," of soils on a landscape that formed in similar kinds of parent material but have different characteristics as a result of differences in relief and drainage.

Cation. An ion carrying a positive charge of electricity. The common soil cations are calcium, potassium, magnesium, sodium, and hydrogen.

Cation-exchange capacity. The total amount of exchangeable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. The term, as applied

to soils, is synonymous with base-exchange capacity but is more precise in meaning.

Catsteps. Very small, irregular terraces on steep hillsides, especially in pasture, formed by the trampling of cattle or the slippage of saturated soil.

Cement rock. Shaly limestone used in the manufacture of cement.

Channery soil material. Soil material that has, by volume, 15 to 35 percent thin, flat fragments of sandstone, shale, slate, limestone, or schist as much as 6 inches (15 centimeters) along the longest axis. A single piece is called a channer.

Chemical treatment. Control of unwanted vegetation through the use of chemicals.

Chiseling. Tillage with an implement having one or more soil-penetrating points that shatter or loosen hard, compacted layers to a depth below normal plow depth.

Clay. As a soil separate, the mineral soil particles less than 0.002 millimeter in diameter. As a soil textural class, soil material that is 40 percent or more clay, less than 45 percent sand, and less than 40 percent silt.

Clay depletions. Low-chroma zones having a low content of iron, manganese, and clay because of the chemical reduction of iron and manganese and the removal of iron, manganese, and clay. A type of redoximorphic depletion.

Clay film. A thin coating of oriented clay on the surface of a soil aggregate or lining pores or root channels. Synonyms: clay coating, clay skin.

Claypan. A slowly permeable soil horizon that contains much more clay than the horizons above it. A claypan is commonly hard when dry and plastic or stiff when wet.

Climax plant community. The stabilized plant community on a particular site. The plant cover reproduces itself and does not change so long as the environment remains the same.

Coarse textured soil. Sand or loamy sand.

Cobble (or cobblestone). A rounded or partly rounded fragment of rock 3 to 10 inches (7.6 to 25 centimeters) in diameter.

Cobbly soil material. Material that has 15 to 35 percent, by volume, rounded or partially rounded rock fragments 3 to 10 inches (7.6 to 25 centimeters) in diameter. Very cobbly soil material has 35 to 60 percent of these rock fragments, and extremely cobbly soil material has more than 60 percent.

COLE (coefficient of linear extensibility). See Linear extensibility.

Colluvium. Soil material or rock fragments, or both, moved by creep, slide, or local wash and deposited at the base of steep slopes.

Complex slope. Irregular or variable slope. Planning or establishing terraces, diversions, and other water-control structures on a complex slope is difficult.

Complex, soil. A map unit of two or more kinds of soil or miscellaneous areas in such an intricate pattern or so small in area that it is not practical to map them separately at the selected scale of mapping. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas.

Concretions. Cemented bodies with crude internal symmetry organized around a point, a line, or a plane. They typically take the form of concentric layers visible to the naked eye. Calcium carbonate, iron oxide, and manganese oxide are common compounds making up concretions. If formed in place, concretions of iron oxide or manganese oxide are generally considered a type of redoximorphic concentration.

Congeliturbate. Soil material disturbed by frost action.

Conglomerate. A coarse grained, clastic rock composed of rounded or subangular rock fragments more than 2 millimeters in diameter. It commonly has a matrix of sand and finer textured material. Conglomerate is the consolidated equivalent of gravel.

Conservation cropping system. Growing crops in combination with needed cultural and management practices. In a good conservation cropping system, the soil-improving crops and practices more than offset the effects of the soil-depleting crops and practices. Cropping systems are needed on all tilled soils. Soil-improving practices in a conservation cropping system include the use of rotations that contain grasses and legumes and the return of crop residue to the soil. Other practices include the use of green manure crops of grasses and legumes, proper tillage, adequate fertilization, and weed and pest control.

Conservation tillage. A tillage system that does not invert the soil and that leaves a protective amount of crop residue on the surface throughout the year.

Consistence, soil. Refers to the degree of cohesion and adhesion of soil material and its resistance to deformation when ruptured. Consistence includes resistance of soil material to rupture

and to penetration; plasticity, toughness, and stickiness of puddled soil material; and the manner in which the soil material behaves when subject to compression. Terms describing consistence are defined in the "Soil Survey Manual."

Contour stripcropping. Growing crops in strips that follow the contour. Strips of grass or close-growing crops are alternated with strips of clean-tilled crops or summer fallow.

Control section. The part of the soil on which classification is based. The thickness varies among different kinds of soil, but for many it is that part of the soil profile between depths of 10 inches and 40 or 80 inches.

Coppice dune. A small dune of fine grained soil material stabilized around shrubs or small trees.

Coprogenous earth (sedimentary peat). Fecal material deposited in water by aquatic organisms.

Corrosion. Soil-induced electrochemical or chemical action that dissolves or weakens concrete or uncoated steel.

Cover crop. A close-growing crop grown primarily to improve and protect the soil between periods of regular crop production, or a crop grown between trees and vines in orchards and vineyards.

Cropping system. Growing crops according to a planned system of rotation and management practices.

Crop residue management. Returning crop residue to the soil, which helps to maintain soil structure, organic matter content, and fertility and helps to control erosion.

Cross-slope farming. Deliberately conducting farming operations on sloping farmland in such a way that tillage is across the general slope.

Crown. The upper part of a tree or shrub, including the living branches and their foliage.

Cuesta. A hill or ridge that has a gentle slope on one side and a steep slope on the other; specifically, an asymmetric, homoclinal ridge capped by resistant rock layers of slight or moderate dip.

Culmination of the mean annual increment (CMAI). The average annual increase per acre in the volume of a stand. Computed by dividing the total volume of the stand by its age. As the stand increases in age, the mean annual increment continues to increase until mortality begins to reduce the rate of increase. The point where the stand reaches its maximum annual rate of growth is called the culmination of the mean annual increment.

Cutbanks cave (in tables). The walls of excavations tend to cave in or slough.

Decreasers. The most heavily grazed climax range plants. Because they are the most palatable, they are the first to be destroyed by overgrazing.

Deferred grazing. Postponing grazing or resting grazing land for a prescribed period.

Delta. A body of alluvium having a surface that is nearly flat and fan shaped; deposited at or near the mouth of a river or stream where it enters a body of relatively quiet water, generally a sea or lake.

Dense layer (in tables). A very firm, massive layer that has a bulk density of more than 1.8 grams per cubic centimeter. Such a layer affects the ease of digging and can affect filling and compacting.

Depth, soil. Generally, the thickness of the soil over bedrock. Very deep soils are more than 60 inches deep over bedrock; deep soils, 40 to 60 inches; moderately deep, 20 to 40 inches; shallow, 10 to 20 inches; and very shallow, less than 10 inches.

Desert pavement. On a desert surface, a layer of gravel or larger fragments that was emplaced by upward movement of the underlying sediments or that remains after finer particles have been removed by running water or the wind.

Dip slope. A slope of the land surface, roughly determined by and approximately conforming to the dip of the underlying bedrock.

Diversion (or diversion terrace). A ridge of earth, generally a terrace, built to protect downslope areas by diverting runoff from its natural course.

Divided-slope farming. A form of field stripcropping in which crops are grown in a systematic arrangement of two strips, or bands, across the slope to reduce the hazard of water erosion. One strip is in a close-growing crop that provides protection from erosion, and the other strip is in a crop that provides less protection from erosion. This practice is used where slopes are not long enough to permit a full stripcropping pattern to be used.

Drainage class (natural). Refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized—*excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained,* and *very poorly drained*. These classes are defined in the "Soil Survey Manual."

Drainage, surface. Runoff, or surface flow of water, from an area.

Draw. A small stream valley that generally is more open and has broader bottom land than a ravine or gulch.

Duff. A generally firm organic layer on the surface of mineral soils. It consists of fallen plant material that is in the process of decomposition and includes everything from the litter on the surface to underlying pure humus.

Ecological site. An area where climate, soil, and relief are sufficiently uniform to produce a distinct natural plant community. An ecological site is the product of all the environmental factors responsible for its development. It is typified by an association of species that differ from those on other ecological sites in kind and/or proportion of species or in total production.

Eluviation. The movement of material in true solution or colloidal suspension from one place to another within the soil. Soil horizons that have lost material through eluviation are eluvial; those that have received material are illuvial.

Endosaturation. A type of saturation of the soil in which all horizons between the upper boundary of saturation and a depth of 2 meters are saturated.

Eolian soil material. Earthy parent material accumulated through wind action; commonly refers to sandy material in dunes or to loess in blankets on the surface.

Ephemeral stream. A stream, or reach of a stream, that flows only in direct response to precipitation. It receives no long-continued supply from melting snow or other source, and its channel is above the water table at all times.

Episaturation. A type of saturation indicating a perched water table in a soil in which saturated layers are underlain by one or more unsaturated layers within 2 meters of the surface.

Erosion. The wearing away of the land surface by water, wind, ice, or other geologic agents and by such processes as gravitational creep.

Erosion (geologic). Erosion caused by geologic processes acting over long geologic periods and resulting in the wearing away of mountains and the building up of such landscape features as flood plains and coastal plains. Synonym: natural erosion.

Erosion (accelerated). Erosion much more rapid than geologic erosion, mainly as a result of human or animal activities or of a catastrophe in nature, such as a fire, that exposes the surface.

Erosion pavement. A layer of gravel or stones that remains on the surface after fine particles are removed by sheet or rill erosion.

Escarpment. A relatively continuous and steep slope or cliff breaking the general continuity of more gently sloping land surfaces and resulting from erosion or faulting. Synonym: scarp.

Extrusive rock. Igneous rock derived from deep-seated molten matter (magma) emplaced on the earth's surface.

Fallow. Cropland left idle in order to restore productivity through accumulation of moisture. Summer fallow is common in regions of limited rainfall where cereal grain is grown. The soil is tilled for at least one growing season for weed control and decomposition of plant residue.

Fan terrace. A relict alluvial fan, no longer a site of active deposition, incised by younger and lower alluvial surfaces.

Fertility, soil. The quality that enables a soil to provide plant nutrients, in adequate amounts and in proper balance, for the growth of specified plants when light, moisture, temperature, tilth, and other growth factors are favorable.

Fibric soil material (peat). The least decomposed of all organic soil material. Peat contains a large amount of well preserved fiber that is readily identifiable according to botanical origin. Peat has the lowest bulk density and the highest water content at saturation of all organic soil material.

Field moisture capacity. The moisture content of a soil, expressed as a percentage of the ovendry weight, after the gravitational, or free, water has drained away; the field moisture content 2 or 3 days after a soaking rain; also called *normal field capacity, normal moisture capacity,* or *capillary capacity*.

Fill slope. A sloping surface consisting of excavated soil material from a road cut. It commonly is on the downhill side of the road.

Fine textured soil. Sandy clay, silty clay, or clay.

Firebreak. Area cleared of flammable material to stop or help control creeping or running fires. It also serves as a line from which to work and to facilitate the movement of firefighters and equipment. Designated roads also serve as firebreaks.

First bottom. The normal flood plain of a stream, subject to frequent or occasional flooding.

Flaggy soil material. Material that has, by volume, 15 to 35 percent flagstones. Very flaggy soil material has 35 to 60 percent flagstones, and

extremely flaggy soil material has more than 60 percent flagstones.

Flagstone. A thin fragment of sandstone, limestone, slate, shale, or (rarely) schist 6 to 15 inches (15 to 38 centimeters) long.

Flood plain. A nearly level alluvial plain that borders a stream and is subject to flooding unless protected artificially.

Fluvial. Of or pertaining to rivers; produced by river action, as a fluvial plain.

Foothill. A steeply sloping upland that has relief of as much as 1,000 feet (300 meters) and fringes a mountain range or high-plateau escarpment.

Footslope. The position that forms the inner, gently inclined surface at the base of a hillslope. In profile, footslopes are commonly concave. A footslope is a transition zone between upslope sites of erosion and transport (shoulders and backslopes) and downslope sites of deposition (toeslopes).

Forb. Any herbaceous plant not a grass or a sedge.

Forest cover. All trees and other woody plants (underbrush) covering the ground in a forest.

Forest type. A stand of trees similar in composition and development because of given physical and biological factors by which it may be differentiated from other stands.

Fragipan. A loamy, brittle subsurface horizon low in porosity and content of organic matter and low or moderate in clay but high in silt or very fine sand. A fragipan appears cemented and restricts roots. When dry, it is hard or very hard and has a higher bulk density than the horizon or horizons above. When moist, it tends to rupture suddenly under pressure rather than to deform slowly.

Genesis, soil. The mode of origin of the soil. Refers especially to the processes or soil-forming factors responsible for the formation of the solum, or true soil, from the unconsolidated parent material.

Gilgai. Commonly, a succession of microbasins and microknolls in nearly level areas or of microvalleys and microridges parallel with the slope. Typically, the microrelief of clayey soils that shrink and swell considerably with changes in moisture content.

Gleyed soil. Soil that formed under poor drainage, resulting in the reduction of iron and other elements in the profile and in gray colors.

Graded stripcropping. Growing crops in strips that grade toward a protected waterway.

Grassed waterway. A natural or constructed waterway, typically broad and shallow, seeded to grass as protection against erosion. Conducts surface water away from cropland.

Gravel. Rounded or angular fragments of rock as much as 3 inches (2 millimeters to 7.6 centimeters) in diameter. An individual piece is a pebble.

Gravelly soil material. Material that has 15 to 35 percent, by volume, rounded or angular rock fragments, not prominently flattened, as much as 3 inches (7.6 centimeters) in diameter.

Green manure crop (agronomy). A soil-improving crop grown to be plowed under in an early stage of maturity or soon after maturity.

Ground water. Water filling all the unblocked pores of the material below the water table.

Gully. A miniature valley with steep sides cut by running water and through which water ordinarily runs only after rainfall. The distinction between a gully and a rill is one of depth. A gully generally is an obstacle to farm machinery and is too deep to be obliterated by ordinary tillage; a rill is of lesser depth and can be smoothed over by ordinary tillage.

Hard bedrock. Bedrock that cannot be excavated except by blasting or by the use of special equipment that is not commonly used in construction.

Hardpan. A hardened or cemented soil horizon, or layer. The soil material is sandy, loamy, or clayey and is cemented by iron oxide, silica, calcium carbonate, or other substance.

Hard to reclaim (in tables). Reclamation is difficult after the removal of soil for construction and other uses. Revegetation and erosion control are extremely difficult.

Head out. To form a flower head.

Head slope. A geomorphic component of hills consisting of a laterally concave area of a hillside, especially at the head of a drainageway. The overland waterflow is converging.

Hemic soil material (mucky peat). Organic soil material intermediate in degree of decomposition between the less decomposed fibric material and the more decomposed sapric material.

High-residue crops. Such crops as small grain and corn used for grain. If properly managed, residue from these crops can be used to control erosion until the next crop in the rotation is established. These crops return large amounts of organic matter to the soil.

Hill. A natural elevation of the land surface, rising as much as 1,000 feet above surrounding lowlands, commonly of limited summit area and having a

well defined outline; hillsides generally have slopes of more than 15 percent. The distinction between a hill and a mountain is arbitrary and is dependent on local usage.

Horizon, soil. A layer of soil, approximately parallel to the surface, having distinct characteristics produced by soil-forming processes. In the identification of soil horizons, an uppercase letter represents the major horizons. Numbers or lowercase letters that follow represent subdivisions of the major horizons. An explanation of the subdivisions is given in the "Soil Survey Manual." The major horizons of mineral soil are as follows:

O horizon.—An organic layer of fresh and decaying plant residue.

A horizon.—The mineral horizon at or near the surface in which an accumulation of humified organic matter is mixed with the mineral material. Also, a plowed surface horizon, most of which was originally part of a B horizon.

E horizon.—The mineral horizon in which the main feature is loss of silicate clay, iron, aluminum, or some combination of these.

B horizon.—The mineral horizon below an A horizon. The B horizon is in part a layer of transition from the overlying A to the underlying C horizon. The B horizon also has distinctive characteristics, such as (1) accumulation of clay, sesquioxides, humus, or a combination of these; (2) prismatic or blocky structure; (3) redder or browner colors than those in the A horizon; or (4) a combination of these.

C horizon.—The mineral horizon or layer, excluding indurated bedrock, that is little affected by soil-forming processes and does not have the properties typical of the overlying soil material. The material of a C horizon may be either like or unlike that in which the solum formed. If the material is known to differ from that in the solum, an Arabic numeral, commonly a 2, precedes the letter C.

Cr horizon.—Soft, consolidated bedrock beneath the soil.

R layer.—Consolidated bedrock beneath the soil. The bedrock commonly underlies a C horizon, but it can be directly below an A or a B horizon.

Humus. The well decomposed, more or less stable part of the organic matter in mineral soils.

Hydrologic soil groups. Refers to soils grouped according to their runoff potential. The soil properties that influence this potential are those that affect the minimum rate of water infiltration on a bare soil during periods after prolonged wetting when the soil is not frozen. These properties are depth to a seasonal high water table, the infiltration rate and permeability after prolonged wetting, and depth to a very slowly permeable layer. The slope and the kind of plant cover are not considered but are separate factors in predicting runoff.

Igneous rock. Rock formed by solidification from a molten or partially molten state. Major varieties include plutonic and volcanic rock. Examples are andesite, basalt, and granite.

Illuviation. The movement of soil material from one horizon to another in the soil profile. Generally, material is removed from an upper horizon and deposited in a lower horizon.

Impervious soil. A soil through which water, air, or roots penetrate slowly or not at all. No soil is absolutely impervious to air and water all the time.

Increasers. Species in the climax vegetation that increase in amount as the more desirable plants are reduced by close grazing. Increasers commonly are the shorter plants and the less palatable to livestock.

Infiltration. The downward entry of water into the immediate surface of soil or other material, as contrasted with percolation, which is movement of water through soil layers or material.

Infiltration capacity. The maximum rate at which water can infiltrate into a soil under a given set of conditions.

Infiltration rate. The rate at which water penetrates the surface of the soil at any given instant, usually expressed in inches per hour. The rate can be limited by the infiltration capacity of the soil or the rate at which water is applied at the surface.

Intake rate. The average rate of water entering the soil under irrigation. Most soils have a fast initial rate; the rate decreases with application time. Therefore, intake rate for design purposes is not a constant but is a variable depending on the net irrigation application. The rate of water intake, in inches per hour, is expressed as follows:

Less than 0.2	very low
0.2 to 0.4	low
0.4 to 0.75	moderately low
0.75 to 1.25	moderate
1.25 to 1.75	moderately high
1.75 to 2.5	high
More than 2.5	very high

Interfluve. An elevated area between two drainageways that sheds water to those drainageways.

Intermittent stream. A stream, or reach of a stream, that flows for prolonged periods only when it receives ground-water discharge or long, continued contributions from melting snow or other surface and shallow subsurface sources.

Invaders. On range, plants that encroach into an area and grow after the climax vegetation has been reduced by grazing. Generally, plants invade following disturbance of the surface.

Iron depletions. Low-chroma zones having a low content of iron and manganese oxide because of chemical reduction and removal, but having a clay content similar to that of the adjacent matrix. A type of redoximorphic depletion.

Irrigation. Application of water to soils to assist in production of crops. Methods of irrigation are:

Basin.—Water is applied rapidly to nearly level plains surrounded by levees or dikes.

Border.—Water is applied at the upper end of a strip in which the lateral flow of water is controlled by small earth ridges called border dikes, or borders.

Controlled flooding.—Water is released at intervals from closely spaced field ditches and distributed uniformly over the field.

Corrugation.—Water is applied to small, closely spaced furrows or ditches in fields of close-growing crops or in orchards so that it flows in only one direction.

Drip (or trickle).—Water is applied slowly and under low pressure to the surface of the soil or into the soil through such applicators as emitters, porous tubing, or perforated pipe.

Furrow.—Water is applied in small ditches made by cultivation implements. Furrows are used for tree and row crops.

Sprinkler.—Water is sprayed over the soil surface through pipes or nozzles from a pressure system.

Subirrigation.—Water is applied in open ditches or tile lines until the water table is raised enough to wet the soil.

Wild flooding.—Water, released at high points, is allowed to flow onto an area without controlled distribution.

Karst (topography). The relief of an area underlain by limestone that dissolves in differing degrees, thus forming numerous depressions or small basins.

Knoll. A small, low, rounded hill rising above adjacent landforms.

K_{sat}. Saturated hydraulic conductivity. (See Permeability.)

Lacustrine deposit. Material deposited in lake water and exposed when the water level is lowered or the elevation of the land is raised.

Landslide. The rapid downhill movement of a mass of soil and loose rock, generally when wet or saturated. The speed and distance of movement, as well as the amount of soil and rock material, vary greatly.

Large stones (in tables). Rock fragments 3 inches (7.6 centimeters) or more across. Large stones adversely affect the specified use of the soil.

Leaching. The removal of soluble material from soil or other material by percolating water.

Linear extensibility. Refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. Linear extensibility is used to determine the shrink-swell potential of soils. It is an expression of the volume change between the water content of the clod at $^1/_3$- or $^1/_{10}$-bar tension (33kPa or 10kPa tension) and oven dryness. Volume change is influenced by the amount and type of clay minerals in the soil. The volume change is the percent change for the whole soil. If it is expressed as a fraction, the resulting value is COLE, coefficient of linear extensibility.

Liquid limit. The moisture content at which the soil passes from a plastic to a liquid state.

Loam. Soil material that is 7 to 27 percent clay particles, 28 to 50 percent silt particles, and less than 52 percent sand particles.

Loess. Fine grained material, dominantly of silt-sized particles, deposited by wind.

Low-residue crops. Such crops as corn used for silage, peas, beans, and potatoes. Residue from these crops is not adequate to control erosion until the next crop in the rotation is established. These crops return little organic matter to the soil.

Low strength. The soil is not strong enough to support loads.

Major Land Resource Area. A geographic area, usually several million acres in extent, that is characterized by a particular pattern of soils, climate, water resources, and land uses. It is a category in a USDA system of land classification that is applied to all land of the United States. Identification of these areas is important in statewide resource planning and has value in interstate, regional, and national planning.

Marl. An earthy, unconsolidated deposit consisting chiefly of calcium carbonate mixed with clay in approximately equal amounts.

Masses. Concentrations of substances in the soil matrix that do not have a clearly defined

boundary with the surrounding soil material and cannot be removed as a discrete unit. Common compounds making up masses are calcium carbonate, gypsum or other soluble salts, iron oxide, and manganese oxide. Masses consisting of iron oxide or manganese oxide generally are considered a type of redoximorphic concentration.

Mechanical treatment. Use of mechanical equipment for seeding, brush management, and other management practices.

Medium textured soil. Very fine sandy loam, loam, silt loam, or silt.

Mesa. A broad, nearly flat topped and commonly isolated upland mass characterized by summit widths that are more than the heights of bounding erosional scarps.

Metamorphic rock. Rock of any origin altered in mineralogical composition, chemical composition, or structure by heat, pressure, and movement. Nearly all such rocks are crystalline.

Mineral soil. Soil that is mainly mineral material and low in organic material. Its bulk density is more than that of organic soil.

Minimum tillage. Only the tillage essential to crop production and prevention of soil damage.

Miscellaneous area. An area that has little or no natural soil and supports little or no vegetation.

Moderately coarse textured soil. Coarse sandy loam, sandy loam, or fine sandy loam.

Moderately fine textured soil. Clay loam, sandy clay loam, or silty clay loam.

Mollic epipedon. A thick, dark, humus-rich surface horizon (or horizons) that has high base saturation and pedogenic soil structure. It may include the upper part of the subsoil.

Morphology, soil. The physical makeup of the soil, including the texture, structure, porosity, consistence, color, and other physical, mineral, and biological properties of the various horizons, and the thickness and arrangement of those horizons in the soil profile.

Mottling, soil. Irregular spots of different colors that vary in number and size. Descriptive terms are as follows: abundance—*few, common,* and *many;* size—*fine, medium,* and *coarse;* and contrast—*faint, distinct,* and *prominent*. The size measurements are of the diameter along the greatest dimension. *Fine* indicates less than 5 millimeters (about 0.2 inch); *medium,* from 5 to 15 millimeters (about 0.2 to 0.6 inch); and *coarse,* more than 15 millimeters (about 0.6 inch).

Mountain. A natural elevation of the land surface, rising more than 1,000 feet above surrounding lowlands, commonly of restricted summit area (relative to a plateau) and generally having steep sides. A mountain can occur as a single, isolated mass or in a group forming a chain or range.

Muck. Dark, finely divided, well decomposed organic soil material. (See Sapric soil material.)

Mudstone. Sedimentary rock formed by induration of silt and clay in approximately equal amounts.

Munsell notation. A designation of color by degrees of three simple variables—hue, value, and chroma. For example, a notation of 10YR 6/4 is a color with hue of 10YR, value of 6, and chroma of 4.

Natric horizon. A special kind of argillic horizon that contains enough exchangeable sodium to have an adverse effect on the physical condition of the subsoil.

Neutral soil. A soil having a pH value of 6.6 to 7.3. (See Reaction, soil.)

Nodules. Cemented bodies lacking visible internal structure. Calcium carbonate, iron oxide, and manganese oxide are common compounds making up nodules. If formed in place, nodules of iron oxide or manganese oxide are considered types of redoximorphic concentrations.

Nose slope. A geomorphic component of hills consisting of the projecting end (laterally convex area) of a hillside. The overland waterflow is predominantly divergent.

Nutrient, plant. Any element taken in by a plant essential to its growth. Plant nutrients are mainly nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, iron, manganese, copper, boron, and zinc obtained from the soil and carbon, hydrogen, and oxygen obtained from the air and water.

Organic matter. Plant and animal residue in the soil in various stages of decomposition. The content of organic matter in the surface layer is described as follows:

Very low	less than 0.5 percent
Low	0.5 to 1.0 percent
Moderately low	1.0 to 2.0 percent
Moderate	2.0 to 4.0 percent
High	4.0 to 8.0 percent
Very high	more than 8.0 percent

Outwash plain. A landform of mainly sandy or coarse textured material of glaciofluvial origin. An outwash plain is commonly smooth; where pitted, it generally is low in relief.

Paleoterrace. An erosional remnant of a terrace that retains the surface form and alluvial deposits of its origin but was not emplaced by, and

commonly does not grade to, a present-day stream or drainage network.

Pan. A compact, dense layer in a soil that impedes the movement of water and the growth of roots. For example, *hardpan, fragipan, claypan, plowpan,* and *traffic pan*.

Parent material. The unconsolidated organic and mineral material in which soil forms.

Peat. Unconsolidated material, largely undecomposed organic matter, that has accumulated under excess moisture. (See Fibric soil material.)

Ped. An individual natural soil aggregate, such as a granule, a prism, or a block.

Pedisediment. A thin layer of alluvial material that mantles an erosion surface and has been transported to its present position from higher lying areas of the erosion surface.

Pedon. The smallest volume that can be called "a soil." A pedon is three dimensional and large enough to permit study of all horizons. Its area ranges from about 10 to 100 square feet (1 square meter to 10 square meters), depending on the variability of the soil.

Percolation. The movement of water through the soil.

Permafrost. Layers of soil, or even bedrock, occurring in arctic or subarctic regions, in which a temperature below freezing has existed continuously for a long time.

Permeability. The quality of the soil that enables water or air to move downward through the profile. The rate at which a saturated soil transmits water is accepted as a measure of this quality. In soil physics, the rate is referred to as "saturated hydraulic conductivity," which is defined in the "Soil Survey Manual." In line with conventional usage in the engineering profession and with traditional usage in published soil surveys, this rate of flow continues to be expressed as "permeability." Terms describing permeability, measured in inches per hour, are as follows:

Impermeable	less than 0.0015 inch
Very slow	0.0015 to 0.06 inch
Slow	0.06 to 0.2 inch
Moderately slow	0.2 to 0.6 inch
Moderate	0.6 inch to 2.0 inches
Moderately rapid	2.0 to 6.0 inches
Rapid	6.0 to 20 inches
Very rapid	more than 20 inches

Phase, soil. A subdivision of a soil series based on features that affect its use and management, such as slope, stoniness, and flooding.

pH value. A numerical designation of acidity and alkalinity in soil. (See Reaction, soil.)

Piping (in tables). Formation of subsurface tunnels or pipelike cavities by water moving through the soil.

Pitting (in tables). Pits caused by melting around ice. They form on the soil after plant cover is removed.

Plasticity index. The numerical difference between the liquid limit and the plastic limit; the range of moisture content within which the soil remains plastic.

Plastic limit. The moisture content at which a soil changes from semisolid to plastic.

Plateau. An extensive upland mass with relatively flat summit area that is considerably elevated (more than 100 meters) above adjacent lowlands and separated from them on one or more sides by escarpments.

Playa. The generally dry and nearly level lake plain that occupies the lowest parts of closed depressional areas, such as those on intermontane basin floors. Temporary flooding occurs primarily in response to precipitation and runoff.

Plinthite. The sesquioxide-rich, humus-poor, highly weathered mixture of clay with quartz and other diluents. It commonly appears as red mottles, usually in platy, polygonal, or reticulate patterns. Plinthite changes irreversibly to an ironstone hardpan or to irregular aggregates on repeated wetting and drying, especially if it is exposed also to heat from the sun. In a moist soil, plinthite can be cut with a spade. It is a form of laterite.

Plowpan. A compacted layer formed in the soil directly below the plowed layer.

Ponding. Standing water on soils in closed depressions. Unless the soils are artificially drained, the water can be removed only by percolation or evapotranspiration.

Poorly graded. Refers to a coarse grained soil or soil material consisting mainly of particles of nearly the same size. Because there is little difference in size of the particles, density can be increased only slightly by compaction.

Potential native plant community. See Climax plant community.

Potential rooting depth (effective rooting depth). Depth to which roots could penetrate if the content of moisture in the soil were adequate. The soil has no properties restricting the penetration of roots to this depth.

Prescribed burning. Deliberately burning an area for specific management purposes, under the

appropriate conditions of weather and soil moisture and at the proper time of day.

Productivity, soil. The capability of a soil for producing a specified plant or sequence of plants under specific management.

Profile, soil. A vertical section of the soil extending through all its horizons and into the parent material.

Proper grazing use. Grazing at an intensity that maintains enough cover to protect the soil and maintain or improve the quantity and quality of the desirable vegetation. This practice increases the vigor and reproduction capacity of the key plants and promotes the accumulation of litter and mulch necessary to conserve soil and water.

Rangeland. Land on which the potential natural vegetation is predominantly grasses, grasslike plants, forbs, or shrubs suitable for grazing or browsing. It includes natural grasslands, savannas, many wetlands, some deserts, tundras, and areas that support certain forb and shrub communities.

Reaction, soil. A measure of acidity or alkalinity of a soil, expressed in pH values. A soil that tests to pH 7.0 is described as precisely neutral in reaction because it is neither acid nor alkaline. The degrees of acidity or alkalinity, expressed as pH values, are:

Ultra acid	less than 3.5
Extremely acid	3.5 to 4.4
Very strongly acid	4.5 to 5.0
Strongly acid	5.1 to 5.5
Moderately acid	5.6 to 6.0
Slightly acid	6.1 to 6.5
Neutral	6.6 to 7.3
Slightly alkaline	7.4 to 7.8
Moderately alkaline	7.9 to 8.4
Strongly alkaline	8.5 to 9.0
Very strongly alkaline	9.1 and higher

Red beds. Sedimentary strata that are mainly red and are made up largely of sandstone and shale.

Redoximorphic concentrations. Nodules, concretions, soft masses, pore linings, and other features resulting from the accumulation of iron or manganese oxide. An indication of chemical reduction and oxidation resulting from saturation.

Redoximorphic depletions. Low-chroma zones from which iron and manganese oxide or a combination of iron and manganese oxide and clay has been removed. These zones are indications of the chemical reduction of iron resulting from saturation.

Redoximorphic features. Redoximorphic concentrations, redoximorphic depletions, reduced matrices, a positive reaction to alpha,alpha-dipyridyl, and other features indicating the chemical reduction and oxidation of iron and manganese compounds resulting from saturation.

Reduced matrix. A soil matrix that has low chroma in situ because of chemically reduced iron (Fe II). The chemical reduction results from nearly continuous wetness. The matrix undergoes a change in hue or chroma within 30 minutes after exposure to air as the iron is oxidized (Fe III). A type of redoximorphic feature.

Regolith. The unconsolidated mantle of weathered rock and soil material on the earth's surface; the loose earth material above the solid rock.

Relief. The elevations or inequalities of a land surface, considered collectively.

Residuum (residual soil material). Unconsolidated, weathered or partly weathered mineral material that accumulated as consolidated rock disintegrated in place.

Rill. A steep-sided channel resulting from accelerated erosion. A rill generally is a few inches deep and not wide enough to be an obstacle to farm machinery.

Road cut. A sloping surface produced by mechanical means during road construction. It is commonly on the uphill side of the road.

Rock fragments. Rock or mineral fragments having a diameter of 2 millimeters or more; for example, pebbles, cobbles, stones, and boulders.

Root zone. The part of the soil that can be penetrated by plant roots.

Runoff. The precipitation discharged into stream channels from an area. The water that flows off the surface of the land without sinking into the soil is called surface runoff. Water that enters the soil before reaching surface streams is called ground-water runoff or seepage flow from ground water.

Saline soil. A soil containing soluble salts in an amount that impairs growth of plants. A saline soil does not contain excess exchangeable sodium.

Salinity (in map unit descriptions). The degree to which a soil is affected by soluble salts. Salinity is expressed as the electrical conductivity of the

saturation extract in millimhos per centimeter at 25 degrees C. The degrees of salinity and their respective conductivities in millimhos per centimeter are:

Nonsaline	0 to 2
Very slightly saline	2 to 4
Slightly saline	4 to 8
Moderately saline	8 to 16
Strongly saline	more than 16

Sand. As a soil separate, individual rock or mineral fragments from 0.05 millimeter to 2.0 millimeters in diameter. Most sand grains consist of quartz. As a soil textural class, a soil that is 85 percent or more sand and not more than 10 percent clay.

Sandstone. Sedimentary rock containing dominantly sand-sized particles.

Sapric soil material (muck). The most highly decomposed of all organic soil material. Muck has the least amount of plant fiber, the highest bulk density, and the lowest water content at saturation of all organic soil material.

Saprolite. Unconsolidated residual material underlying the soil and grading to hard bedrock below.

Saturation. Wetness characterized by zero or positive pressure of the soil water. Under conditions of saturation, the water will flow from the soil matrix into an unlined auger hole.

Scarification. The act of abrading, scratching, loosening, crushing, or modifying the surface to increase water absorption or to provide a more tillable soil.

Second bottom. The first terrace above the normal flood plain (or first bottom) of a river.

Sedimentary rock. Rock made up of particles deposited from suspension in water. The chief kinds of sedimentary rock are conglomerate, formed from gravel; sandstone, formed from sand; shale, formed from clay; and limestone, formed from soft masses of calcium carbonate. There are many intermediate types. Some wind-deposited sand is consolidated into sandstone.

Sequum. A sequence consisting of an illuvial horizon and the overlying eluvial horizon. (See Eluviation.)

Series, soil. A group of soils that have profiles that are almost alike, except for differences in texture of the surface layer. All the soils of a series have horizons that are similar in composition, thickness, and arrangement.

Shale. Sedimentary rock formed by the hardening of a clay deposit.

Sheet erosion. The removal of a fairly uniform layer of soil material from the land surface by the action of rainfall and surface runoff.

Shoulder. The position that forms the uppermost inclined surface near the top of a hillslope. It is a transition from backslope to summit. The surface is dominantly convex in profile and erosional in origin.

Shrink-swell potential (in map unit descriptions). A measure of the potential expansion of a soil upon wetting, also termed "linear extensibility." It is the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is expressed as the volume change, as a percent of the whole soil, from the water content of a clod at 1/3-bar tension (33kPa) to oven dryness. As used in the map unit descriptions, classes of shrink swell potential are based on the thickest layer between a depth of 10 and 60 inches. The classes and their respective values of percent linear extensibility are:

Low	0 to 3
Moderate	3 to 6
High	6 to 9
Very high	more than 9

Side slope. A geomorphic component of hills consisting of a laterally planar area of a hillside. The overland waterflow is predominantly parallel.

Silica. A combination of silicon and oxygen. The mineral form is called quartz.

Silica-sesquioxide ratio. The ratio of the number of molecules of silica to the number of molecules of alumina and iron oxide. The more highly weathered soils or their clay fractions in warm-temperate, humid regions, and especially those in the tropics, generally have a low ratio.

Silt. As a soil separate, individual mineral particles that range in diameter from the upper limit of clay (0.002 millimeter) to the lower limit of very fine sand (0.05 millimeter). As a soil textural class, soil that is 80 percent or more silt and less than 12 percent clay.

Siltstone. Sedimentary rock made up of dominantly silt-sized particles.

Similar soils. Soils that share limits of diagnostic criteria, behave and perform in a similar manner, and have similar conservation needs or management requirements for the major land uses in the survey area.

Sinkhole. A depression in the landscape where limestone has been dissolved.

Site index. A designation of the quality of a forest site based on the height of the dominant stand at an arbitrarily chosen age. For example, if the average height attained by dominant and codominant trees in a fully stocked stand at the age of 50 years is 75 feet, the site index is 75. Site index is expressed in a different way for species of pinyon and juniper. For these tree species site index is the basal area attained when trees in a stand average 5 inches in diameter.

Slickensides. Polished and grooved surfaces produced by one mass sliding past another. In soils, slickensides may occur at the bases of slip surfaces on the steeper slopes; on faces of blocks, prisms, and columns; and in swelling clayey soils, where there is marked change in moisture content.

Slick spot. A small area of soil having a puddled, crusted, or smooth surface and an excess of exchangeable sodium. The soil generally is silty or clayey, is slippery when wet, and is low in productivity.

Slope. The inclination of the land surface from the horizontal. Percentage of slope is the vertical distance divided by horizontal distance, then multiplied by 100. Thus, a slope of 20 percent is a drop of 20 feet in 100 feet of horizontal distance. In this survey, classes for slopes are as follows:

Nearly level	0 to 3 percent
Gently sloping	3 to 8 percent
Moderately sloping	8 to 15 percent
Strongly sloping	15 to 25 percent
Moderately steep	25 to 40 percent
Steep	40 to 65 percent
Very steep	65 percent and higher

Sloughed till. Water-saturated till that has flowed slowly downhill from its original place of deposit by glacial ice. It may rest on other till, on glacial outwash, or on a glaciolacustrine deposit.

Slow refill (in tables). The slow filling of ponds, resulting from restricted permeability in the soil.

Sodic (alkali) soil. A soil having so high a degree of alkalinity (pH 8.5 or higher) or so high a percentage of exchangeable sodium (15 percent or more of the total exchangeable bases), or both, that plant growth is restricted.

Sodicity. The degree to which a soil is affected by exchangeable sodium. Sodicity is expressed as a sodium adsorption ratio (SAR) of a saturation extract, or the ratio of Na^{+} to $Ca^{++} + Mg^{++}$. The degrees of sodicity and their respective ratios are:

Nonsodic	0
Slight	less than 13:1
Moderate	13-30:1
Strong	more than 30:1

Sodium adsorption ratio (SAR). A measure of the amount of sodium (Na) relative to calcium (Ca) and magnesium (Mg) in the water extract from saturated soil paste. It is the ratio of the Na concentration divided by the square root of one-half of the Ca + Mg concentration.

Soft bedrock. Bedrock that can be excavated with trenching machines, backhoes, small rippers, and other equipment commonly used in construction.

Soil. A natural, three-dimensional body at the earth's surface. It is capable of supporting plants and has properties resulting from the integrated effect of climate and living matter acting on earthy parent material, as conditioned by relief over periods of time.

Soil separates. Mineral particles less than 2 millimeters in equivalent diameter and ranging between specified size limits. The names and sizes, in millimeters, of separates recognized in the United States are as follows:

Very coarse sand	2.0 to 1.0
Coarse sand	1.0 to 0.5
Medium sand	0.5 to 0.25
Fine sand	0.25 to 0.10
Very fine sand	0.10 to 0.05
Silt	0.05 to 0.002
Clay	less than 0.002

Solum. The upper part of a soil profile, above the C horizon, in which the processes of soil formation are active. The solum in soil consists of the A, E, and B horizons. Generally, the characteristics of the material in these horizons are unlike those of the material below the solum. The living roots and plant and animal activities are largely confined to the solum.

Stone line. A concentration of coarse fragments in a soil. Generally, it is indicative of an old weathered surface. In a cross section, the line may be one fragment or more thick. It generally overlies material that weathered in place and is overlain by recent sediment of variable thickness.

Stones. Rock fragments 10 to 24 inches (25 to 60 centimeters) in diameter if rounded or 15 to 24 inches (38 to 60 centimeters) in length if flat.

Stony. Refers to a soil containing stones in numbers that interfere with or prevent tillage.

Stripcropping. Growing crops in a systematic arrangement of strips or bands that provide vegetative barriers to wind erosion and water erosion.

Structure, soil. The arrangement of primary soil particles into compound particles or aggregates. The principal forms of soil structure are—*platy* (laminated), *prismatic* (vertical axis of aggregates longer than horizontal), *columnar* (prisms with rounded tops), *blocky* (angular or subangular), and *granular*. *Structureless* soils are either *single grained* (each grain by itself, as in dune sand) or *massive* (the particles adhering without any regular cleavage, as in many hardpans).

Stubble mulch. Stubble or other crop residue left on the soil or partly worked into the soil. It protects the soil from wind erosion and water erosion after harvest, during preparation of a seedbed for the next crop, and during the early growing period of the new crop.

Subsoil. Technically, the B horizon; roughly, the part of the solum below plow depth.

Subsoiling. Tilling a soil below normal plow depth, ordinarily to shatter a hardpan or claypan.

Substratum. The part of the soil below the solum.

Subsurface layer. Any surface soil horizon (A, E, AB, or EB) below the surface layer.

Summer fallow. The tillage of uncropped land during the summer to control weeds and allow storage of moisture in the soil for the growth of a later crop. A practice common in semiarid regions, where annual precipitation is not enough to produce a crop every year. Summer fallow is frequently practiced before planting winter grain.

Summit. The topographically highest position of a hillslope. It has a nearly level (planar or only slightly convex) surface.

Surface layer. The soil ordinarily moved in tillage, or its equivalent in uncultivated soil, ranging in depth from 4 to 10 inches (10 to 25 centimeters). Frequently designated as the "plow layer," or the "Ap horizon."

Surface soil. The A, E, AB, and EB horizons, considered collectively. It includes all subdivisions of these horizons.

Talus. Fragments of rock and other soil material accumulated by gravity at the foot of cliffs or steep slopes.

Taxadjuncts. Soils that cannot be classified in a series recognized in the classification system. Such soils are named for a series they strongly resemble and are designated as taxadjuncts to that series because they differ in ways too small to be of consequence in interpreting their use and behavior. Soils are recognized as taxadjuncts only when one or more of their characteristics are slightly outside the range defined for the family of the series for which the soils are named.

Terrace. An embankment, or ridge, constructed across sloping soils on the contour or at a slight angle to the contour. The terrace intercepts surface runoff so that water soaks into the soil or flows slowly to a prepared outlet. A terrace in a field generally is built so that the field can be farmed. A terrace intended mainly for drainage has a deep channel that is maintained in permanent sod.

Terrace (geologic). An old alluvial plain, ordinarily flat or undulating, bordering a river, a lake, or the sea.

Texture, soil. The relative proportions of sand, silt, and clay particles in a mass of soil. The basic textural classes, in order of increasing proportion of fine particles, are *sand, loamy sand, sandy loam, loam, silt loam, silt, sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay,* and *clay*. The sand, loamy sand, and sandy loam classes may be further divided by specifying "coarse," "fine," or "very fine."

Thin layer (in tables). Otherwise suitable soil material that is too thin for the specified use.

Tilth, soil. The physical condition of the soil as related to tillage, seedbed preparation, seedling emergence, and root penetration.

Toeslope. The position that forms the gently inclined surface at the base of a hillslope. Toeslopes in profile are commonly gentle and linear and are constructional surfaces forming the lower part of a hillslope continuum that grades to valley or closed-depression floors.

Topsoil. The upper part of the soil, which is the most favorable material for plant growth. It is ordinarily rich in organic matter and is used to topdress roadbanks, lawns, and land affected by mining.

Trace elements. Chemical elements, for example, zinc, cobalt, manganese, copper, and iron, in soils in extremely small amounts. They are essential to plant growth.

Tuff. A compacted deposit that is 50 percent or more volcanic ash and dust.

Upland. Land at a higher elevation, in general, than the alluvial plain or stream terrace; land above the lowlands along streams.

Variegation. Refers to patterns of contrasting colors assumed to be inherited from the parent material rather than to be the result of poor drainage.

Water bars. Smooth, shallow ditches or depressional areas that are excavated at an angle across a sloping road. They are used to reduce the downward velocity of water and divert it off and away from the road surface. Water bars can easily be driven over if constructed properly.

Weathering. All physical and chemical changes produced in rocks or other deposits at or near the earth's surface by atmospheric agents. These changes result in disintegration and decomposition of the material.

Well graded. Refers to soil material consisting of coarse grained particles that are well distributed over a wide range in size or diameter. Such soil normally can be easily increased in density and bearing properties by compaction. Contrasts with poorly graded soil.

Wilting point (or permanent wilting point). The moisture content of soil, on an ovendry basis, at which a plant (specifically a sunflower) wilts so much that it does not recover when placed in a humid, dark chamber.

Windthrow. The uprooting and tipping over of trees by the wind.

Tables

Table 1.--Temperature and precipitation

(Recorded in the period 1971-2000 at Maybell, CO 5446)

Month	Temperature						Precipitation				
	Average daily maximum	Average daily minimum	Average	2 years in 10 will have-- Maximum temperature higher than--	2 years in 10 will have-- Minimum temperature lower than--	Average number of growing degree days*	Average	2 years in 10 will have-- Less than--	2 years in 10 will have-- More than--	Average number of days with 0.10 inch or more	Average snowfall
	°F	°F	°F	°F	°F	Units	In.	In.	In.		In.
January-----	32.6	2.0	17.3	53	-36	1	0.95	0.35	1.43	3	14.9
February----	37.6	6.5	22.1	57	-31	1	0.89	0.38	1.34	3	10.6
March-------	49.3	19.1	34.2	70	-3	31	1.18	0.55	1.66	3	8.7
April-------	59.3	25.8	42.5	79	8	135	1.55	0.63	2.37	4	3.9
May---------	69.6	33.2	51.4	86	18	353	1.36	0.33	2.38	4	0.9
June--------	80.1	40.2	60.1	94	27	591	0.95	0.23	1.59	3	0.2
July--------	86.7	46.5	66.6	97	35	802	1.02	0.40	1.60	3	0.0
August------	85.3	45.5	65.4	95	32	769	0.88	0.30	1.42	3	0.0
September---	75.6	35.3	55.4	91	16	445	0.95	0.36	1.47	3	0.2
October-----	63.0	24.9	43.9	81	0	171	1.40	0.64	2.18	3	2.1
November----	44.7	14.4	29.5	67	-15	12	1.24	0.60	1.78	3	11.1
December----	33.9	2.7	18.3	55	-33	1	0.87	0.41	1.18	3	13.8
Yearly:											
Average---	59.8	24.7	42.2	---	---	---	---	---	---	---	---
Extreme---	100	-61	---	98	-43	---	---	---	---	---	---
Total-----	---	---	---	---	---	3311	13.25	8.28	15.03	38	66.3

* A growing degree day is a unit of heat available for plant growth. It can be calculated by adding the maximum and minimum daily temperatures, dividing the sum by 2, and subtracting the temperature below which growth is minimal for the principal crops in the area (40 degrees F).

Table 2.--Freeze dates in spring and fall

(Recorded in the period 1971-2000 at Maybell, CO 5446)

Probability	Temperature		
	24 °F or lower	28 °F or lower	32 °F or lower
Last freezing temperature in spring:			
1 year in 10 later than--	May 20	June 12	June 29
2 years in 10 later than--	May 17	June 6	June 24
5 years in 10 later than--	May 10	May 26	June 14
First freezing temperature in fall:			
1 yr. in 10 earlier than--	September 11	September 6	August 16
2 yrs. in 10 earlier than--	September 16	September 10	August 23
5 yrs. in 10 earlier than--	September 25	September 19	September 5

Table 3.--Growing season

(Recorded for the period 1971-2000 at Maybell, CO 5446)

Probability	Daily Minimum Temperature During growing season		
	Higher than 24 oF	Higher than 28 oF	Higher than 32 oF
	Days	Days	Days
9 years in 10	119	90	64
8 years in 10	126	98	71
5 years in 10	138	114	84
2 years in 10	150	130	96
1 year in 10	157	138	103

Table 4.--Acreage and proportionate extent of the soils

Map symbol	Soil name	Acres	Percent
1	Abor silty clay loam, 12 to 25 percent slopes	5,413	0.2
2	Abor silty clay loam, 25 to 65 percent slopes	6,755	0.2
3	Adderton loam, 1 to 10 percent slopes	5,980	0.2
4	Almy loam, 3 to 15 percent slopes	3,381	0.1
5	Apmay clay loam, 0 to 1 percent slopes	1,637	*
6	Avalon-Mack complex, 1 to 12 percent slopes	4,937	0.2
7	Avalon-Persayo, moist-Degater complex, 3 to 30 percent slopes	4,637	0.2
8	Badland	15,539	0.5
9	Baroid-Eghelm complex, 0 to 3 percent slopes	5,449	0.2
10	Battlement fine sandy loam, 0 to 3 percent slopes	19,181	0.7
11	Battlement silt loam, saline, 0 to 3 percent slopes	5,870	0.2
12	Berlake sandy loam, 3 to 12 percent slopes	20,633	0.7
13	Berlake sandy loam, 12 to 25 percent slopes	6,857	0.2
14	Berlake-Maysprings complex, 3 to 12 percent slopes	16,874	0.6
15	Berlake-Taffom-Gretdivid complex, 10 to 20 percent slopes	38,828	1.4
16	Bilhil clay loam, 0 to 3 percent slopes	2,118	*
17	Binco gravelly clay loam, 15 to 45 percent slopes, very stony	2,538	*
18	Boltus-Beamton complex, 2 to 12 percent slopes	7,441	0.3
19	Borollic Natrargids-Borollic Haplargids-Ustic Torrifluvents complex, 0 to 20 percent slopes	4,916	0.2
20	Brownsto-Castee complex, 3 to 25 percent slopes	8,336	0.3
21	Bulkley stony loam, 15 to 30 percent slopes, very stony	8,987	0.3
22	Bulkley silty clay, 3 to 12 percent slopes	13,768	0.5
23	Bulkley silty clay, 12 to 25 percent slopes	9,958	0.4
24	Bulkley-Quilt complex, 12 to 45 percent slopes	5,006	0.2
25	Campspass fine sandy loam, 3 to 12 percent slopes	2,139	*
26	Campspass fine sandy loam, 12 to 25 percent slopes	2,051	*
27	Canlodore very cobbly loamy sand, 15 to 40 percent slopes	4,494	0.2
28	Carbol-Irigul-Rock outcrop complex, 3 to 25 percent slopes, very stony	10,744	0.4
29	Carbol-Miracle complex, 3 to 12 percent slopes	7,783	0.3
30	Carmody-Rock River-Crestman complex, 6 to 15 percent slopes	11,240	0.4
31	Castee loam, 3 to 12 percent slopes	10,273	0.4
32	Chroder sandy loam, 3 to 12 percent slopes	7,892	0.3
33	Clayburn loam, warm, 3 to 25 percent slopes	4,125	0.1
34	Clayburn-Foidel complex, 25 to 55 percent slopes, very bouldery	3,940	0.1
35	Clayburn-Youga, moist complex, 15 to 45 percent slopes	3,845	0.1
36	Clifsand-Chroder complex, 3 to 12 percent slopes	4,808	0.2
37	Cochetopa loam, 12 to 25 percent slopes	7,759	0.3
38	Cochetopa loam, 25 to 65 percent slopes	3,755	0.1
39	Cochetopa loam, warm, 3 to 12 percent slopes	5,326	0.2
40	Cochetopa-Gothic complex, 10 to 25 percent slopes, extremely bouldery	6,101	0.2
41	Cochetopa-Gothic complex, 25 to 45 percent slopes, extremely stony	6,244	0.2
42	Cochetopa-Jerry complex, 3 to 15 percent slopes, extremely stony	4,809	0.2
43	Coldspring loam, moist, 1 to 12 percent slopes	1,368	*
44	Cowestglen sandy loam, 0 to 3 percent slopes	12,351	0.4
45	Coyet loamy sand, 3 to 12 percent slopes	7,563	0.3
46	Coyet loamy sand, 12 to 25 percent slopes	5,714	0.2
47	Coyet-Crestman, moist complex, 20 to 50 percent slopes	39,092	1.4
48	Crago-Pensore-Grapit association, 6 to 75 percent slopes	34,948	1.2
49	Cryoborolls, slumped, 15 to 50 percent slopes	2,652	*
50	Cushool fine sandy loam, 3 to 12 percent slopes	15,573	0.5
51	Cushool fine sandy loam, 12 to 25 percent slopes	1,768	*
52	Danavore-Waybe complex, 5 to 30 percent slopes	4,352	0.2
53	Davtone-Forsey complex, 12 to 35 percent slopes, very stony	2,364	*
54	Deaver-Avalon complex, 5 to 45 percent slopes	7,006	0.2
55	Deaver-Chipeta complex, 3 to 35 percent slopes	26,151	0.9
56	Debone loam, 0 to 3 percent slopes	2,664	*
57	Detra-Cortyzack complex, 1 to 12 percent slopes	6,179	0.2
58	Diaflats-Fondillas complex, 2 to 15 percent slopes	5,387	0.2
59	Dranyon loam, 3 to 20 percent slopes	2,250	*
60	Dumps, mine	1,829	*
61	Ecklund-Tipperary complex, 1 to 12 percent slopes	10,027	0.4

See footnote at end of table.

Table 4.--Acreage and proportionate extent of the soils--Continued

Map symbol	Soil name	Acres	Percent
62	Eghelm loamy fine sand, 0 to 3 percent slopes	12,519	0.4
63	Eghelm loamy sand, moist, 0 to 3 percent slopes	1,361	*
64	Emlin loam, 1 to 12 percent slopes	25,859	0.9
65	Emlin-Tymosling complex, 1 to 15 percent slopes, very bouldery	4,592	0.2
66	Evanot loam, 1 to 12 percent slopes	18,808	0.7
67	Evanot loam, 12 to 25 percent slopes	4,920	0.2
68	Evanot-Yamo complex, 3 to 20 percent slopes	1,685	*
69	Fenster-Thenipel complex, 3 to 12 percent slopes	6,090	0.2
70	Fluvaquents and Haplaquolls soils, frequently flooded	4,555	0.2
71	Flygare loam, dry, 25 to 65 percent slopes	6,174	0.2
72	Foidel loam, cool, 3 to 25 percent slopes	2,910	0.1
73	Foidel loam, 25 to 65 percent slopes	4,838	0.2
74	Foidel, moist-Flygare-Skyway, moist complex, 3 to 25 percent slopes	4,067	0.1
75	Fonce sandy loam, 1 to 8 percent slopes	6,960	0.2
76	Fonce gravelly sandy loam, 3 to 12 percent slopes, very stony	3,853	0.1
77	Forelle loam, 3 to 12 percent slopes	61,707	2.2
78	Forelle loam, 12 to 25 percent slopes	9,019	0.3
79	Forelle-Evanot complex, 1 to 12 percent slopes	22,474	0.8
80	Forelle-Evanot complex, 12 to 25 percent slopes	9,532	0.3
81	Forelle-Obadia complex, 1 to 8 percent slopes	4,408	0.2
82	Forelle-Pinelli-Maysprings complex, 5 to 20 percent slopes	11,697	0.4
83	Forsey-Libeg complex, 3 to 25 percent slopes, very stony	6,855	0.2
84	Gebson, moist-Youga complex, 5 to 25 percent slopes, extremely stony	2,514	*
85	Giarch fine sandy loam, 0 to 3 percent slopes	1,013	*
86	Gracot-Maybell complex, 5 to 30 percent slopes	15,231	0.5
87	Gretdivid-Taffom-Abor complex, 10 to 30 percent slopes	16,135	0.6
88	Grieves loamy fine sand, 1 to 12 percent slopes	20,666	0.7
89	Grieves loamy fine sand, 12 to 25 percent slopes	2,682	*
90	Grieves-Crestman complex, 10 to 40 percent slopes	97,343	3.4
91	Grieves-Yamo-Crestman association, 3 to 45 percent slopes	11,667	0.4
92	Grimm-Ustic Torriorthents, shallow complex, 15 to 45 percent slopes	2,213	*
93	Gullied land	6,644	0.2
94	Hapney fine sandy loam, moist, 0 to 1 percent slopes	601	*
95	Haterton-Piezon complex, 3 to 12 percent slopes	16,469	0.6
96	Heathcoat stony loam, 1 to 6 percent slopes, extremely stony	2,596	*
97	Heathcoat-Clayburn complex, 5 to 35 percent slopes, very stony	2,942	0.1
98	Herm-Fughes complex, 10 to 20 percent slopes, extremely bouldery	6,761	0.2
99	Hesperus fine sandy loam, dry, 2 to 15 percent slopes	5,326	0.2
100	Hesperus loam, 15 to 50 percent slopes	1,767	*
101	Hesperus loam, 3 to 25 percent slopes, very stony	1,749	*
102	Holter-Detra complex, 3 to 25 percent slopes, extremely stony	5,562	0.2
103	Iles loam, 3 to 12 percent slopes	940	*
104	Ironco-Mulgon, dry complex, 25 to 50 percent slopes, extremely bouldery	6,422	0.2
105	Ironsprings loamy sand, 1 to 15 percent slopes	21,500	0.8
106	Ironsprings loamy sand, 15 to 30 percent slopes	3,823	0.1
107	Ironsprings-Maysprings-Gretdivid complex, 10 to 20 percent slopes	35,241	1.2
108	Jerry-Cochetopa complex, 5 to 35 percent slopes	4,508	0.2
109	Joebas-Rock outcrop complex, 5 to 40 percent slopes	21,577	0.8
110	Kemmerer silty clay loam, 12 to 25 percent slopes	1,826	*
111	Kemmerer-Grapit complex, 15 to 65 percent slopes	7,441	0.3
112	Kemmerer-Moyerson complex, 20 to 40 percent slopes	21,649	0.8
113	Kemmerer-Yamo complex, 5 to 30 percent slopes	16,251	0.6
114	Lamphier fine sandy loam, 3 to 25 percent slopes	2,742	*
115	Lamphier fine sandy loam, 25 to 65 percent slopes	9,866	0.3
116	Lamphier-Jerry complex, 3 to 25 percent slopes	2,527	*
117	Lamphier-Jerry complex, 25 to 65 percent slopes	13,947	0.5
118	Lander loam, 0 to 3 percent slopes	7,248	0.3
119	Langspring sandy loam, 3 to 12 percent slopes	14,708	0.5
120	Layoint-Moosed-Berlake complex, 1 to 20 percent slopes	14,058	0.5
121	Leaps clay loam, 3 to 15 percent slopes, very stony	9,707	0.3
122	Leswill-Rogrube complex, 1 to 7 percent slopes	14,805	0.5
123	Lilsnake-Sandwash complex, 3 to 20 percent slopes	6,224	0.2

See footnote at end of table.

Table 4.--Acreage and proportionate extent of the soils--Continued

Map symbol	Soil name	Acres	Percent
124	Losee-Thornburgh dry, complex, 25 to 65 percent slopes	5,444	0.2
125	Massadona silty clay loam, 0 to 12 percent slopes	16,733	0.6
126	Massadona-Youngston moist, complex, 1 to 8 percent slopes	6,657	0.2
127	Maudlin-Duffymont complex, 3 to 15 percent slopes, very stony	10,401	0.4
128	Maybell sand, 3 to 12 percent slopes	24,681	0.9
129	Maybell sand, 12 to 45 percent slopes	4,905	0.2
130	Maysprings coarse sandy loam, 3 to 12 percent slopes	54,136	1.9
131	Maysprings-Gretdivid complex, 10 to 20 percent slopes	49,398	1.7
132	Milren fine sandy loam, 0 to 10 percent slopes	4,814	0.2
133	Miracle-Coldspring complex, 3 to 12 percent slopes	11,697	0.4
134	Morapos loam, 3 to 12 percent slopes	9,002	0.3
135	Morapos loam, 12 to 25 percent slopes	6,610	0.2
136	Morapos-Pagoda complex, 2 to 12 percent slopes	4,322	0.2
137	Morset-Youga complex, 3 to 12 percent slopes	1,897	*
138	Moyerson-Rentsac complex, 15 to 45 percent slopes	13,234	0.5
139	Muggins gravelly sandy loam, 3 to 20 percent slopes	1,269	*
140	Ninot-Crago-Garlips complex, 15 to 45 percent slopes	6,769	0.2
141	Nortez, cool-Morapos complex, 3 to 12 percent slopes	2,636	*
142	Nortez, cool-Morapos complex, 12 to 25 percent slopes	3,235	0.1
143	Nunemaker clay loam, 3 to 12 percent slopes	1,213	*
144	Pagoda loam, 12 to 25 percent slopes	1,612	*
145	Pagoda clay loam, 1 to 12 percent slopes	4,167	0.1
146	Pavillion-Degater complex, 3 to 20 percent slopes	2,434	*
147	Peeler stony fine sandy loam, 5 to 25 percent slopes, very stony	1,587	*
148	Pilotpeak-Grubrob complex, 1 to 12 percent slopes	1,981	*
149	Pinelli loam, 3 to 12 percent slopes	30,849	1.1
150	Pinelli clay loam, 3 to 15 percent slopes	2,860	0.1
151	Pinelli loam, dry, 3 to 8 percent slopes	4,408	0.2
152	Pinridge loam, 1 to 12 percent slopes	5,919	0.2
153	Pricecreek clay loam, 0 to 4 percent slopes	7,017	0.2
154	Quealman sand, 0 to 3 percent slopes	9,772	0.3
155	Rencot-Duffymont complex, 1 to 25 percent slopes	12,260	0.4
156	Rentsac channery sandy loam, 25 to 65 percent slopes	4,161	0.1
157	Rentsac-Moyerson complex, 25 to 65 percent slopes	57,298	2.0
158	Rock outcrop-Earsman complex, 10 to 45 percent slopes	44,554	1.6
159	Rock outcrop-Haploborolls complex, 10 to 40 percent slopes	24,081	0.8
160	Rock outcrop-Torriorthents complex, 50 to 75 percent slopes	74,718	2.6
161	Rock River sandy loam, 0 to 3 percent slopes	1,497	*
162	Rock River sandy loam, 3 to 12 percent slopes	97,935	3.4
163	Rock River sandy loam, 12 to 25 percent slopes	21,421	0.8
164	Rock River-Taffom complex, 3 to 20 percent slopes	2,954	0.1
165	Rogrube complex, 3 to 12 percent slopes	4,225	0.1
166	Routt loam, 3 to 25 percent slopes	3,446	0.1
167	Routt-Cochetopa-Binco complex, 10 to 30 percent slopes, extremely stony	13,868	0.5
168	Ruedloff sandy loam, 1 to 8 percent slopes	21,384	0.8
169	Ruedloff-Dunul complex, 5 to 25 percent slopes	2,767	*
170	Ryan Park loamy sand, 3 to 15 percent slopes	32,066	1.1
171	Ryan Park sandy loam, 0 to 3 percent slopes	3,450	0.1
172	Ryan Park-Coyet complex, 5 to 25 percent slopes	10,726	0.4
173	Ryark-Powderwash complex, 2 to 15 percent slopes	24,501	0.9
174	Ryark-Maybell complex, 1 to 12 percent slopes	18,042	0.6
175	Sandwash-Langspring-Baston complex, 1 to 6 percent slopes	9,460	0.3
176	Schooner-Rock outcrop complex, 5 to 45 percent slopes	11,900	0.4
177	Schooner-Tricera complex, 5 to 25 percent slopes	6,218	0.2
178	Simanni-Ruedloff complex, 1 to 10 percent slopes	24,544	0.9
179	Skyway fine sandy loam, dry, 15 to 75 percent slopes	10,307	0.4
180	Spool-Maybell complex, 5 to 40 percent slopes	6,372	0.2
181	Stunner sandy loam, 1 to 8 percent slopes	2,494	*
182	Stunner, moist-Emlin complex, 1 to 12 percent slopes	7,692	0.3
183	Styers-Ironsprings-Maysprings complex, 10 to 20 percent slopes	12,310	0.4
184	Styers-Pinelli-Taffom complex, 10 to 25 percent slopes	36,738	1.3
185	Taffom sandy loam, 3 to 15 percent slopes	6,276	0.2

See footnote at end of table.

Table 4.--Acreage and proportionate extent of the soils--Continued

Map symbol	Soil name	Acres	Percent
186	Talamantes loam, 0 to 6 percent slopes	12,771	0.4
187	Talamantes loam, 6 to 15 percent slopes	3,961	0.1
188	Talamantes loam, saline, 0 to 8 percent slopes	16,332	0.6
189	Tipper-Crustown complex, 10 to 40 percent slopes	12,262	0.4
190	Tipperary sand, 5 to 20 percent slopes	1,410	*
191	Tipperary loamy fine sand, 3 to 12 percent slopes	9,732	0.3
192	Tipperary-Willwood complex, 1 to 12 percent slopes	2,591	*
193	Tisworth fine sandy loam, 0 to 9 percent slopes	6,724	0.2
194	Tolman-Duffymont complex, 10 to 30 percent slopes, extremely stony	1,979	*
195	Torriorthents, 12 to 25 percent slopes	46,500	1.6
196	Torriorthents-Baston complex, 3 to 12 percent slopes	27,442	1.0
197	Torriorthents-Rock outcrop, sandstone complex, 25 to 75 percent slopes	119,866	4.2
198	Torriorthents-Rock outcrop, shale complex, 30 to 75 percent slopes	103,102	3.6
199	Torriorthents-Torripsamments complex, 12 to 40 percent slopes	60,929	2.1
200	Tresano sandy loam, 3 to 12 percent slopes	28,572	1.0
201	Tresano-Hiatha-Kandaly association, 2 to 20 percent slopes	18,124	0.6
202	Turzo loam, 0 to 5 percent slopes	7,935	0.3
203	Turzo loam, saline, 1 to 8 percent slopes	3,022	0.1
204	Typic Natrargids, 0 to 5 percent slopes	12,509	0.4
205	Uffens fine sandy loam, 0 to 3 percent slopes	3,707	0.1
206	Ustorthents, frigid-Borolls complex, 25 to 75 percent slopes	51,211	1.8
207	Vermillion-Langspring complex, 3 to 25 percent slopes	20,948	0.7
208	Wallson-Tricera complex, 3 to 15 percent slopes	1,729	*
209	Weed sandy loam, 1 to 12 percent slopes	11,839	0.4
210	Willwood-Sheppard, cool complex, 1 to 12 percent slopes	5,969	0.2
211	Willwood-Tipperary complex, 12 to 40 percent slopes	4,790	0.2
212	Willwood-Tipperary, cobbly substratum complex, 1 to 12 percent slopes	4,622	0.2
213	Winevada-Splitro complex, 3 to 25 percent slopes	2,695	*
214	Winevada-Splitro complex, 25 to 65 percent slopes	2,929	0.1
215	Winkleman clay loam, 0 to 3 percent slopes	1,022	*
216	Yamo loam, 3 to 15 percent slopes	16,262	0.6
217	Yamo loam, 15 to 30 percent slopes	4,502	0.2
218	Yellowwash-Piezon complex, 5 to 15 percent slopes	9,318	0.3
219	Youga loam, 3 to 15 percent slopes	966	*
220	Youga-Dinnen complex, 3 to 12 percent slopes	2,154	*
221	Youga-Gelkie-Clayburn, warm complex, 25 to 45 percent slopes, extremely bouldery	5,749	0.2
222	Youngston loam, cool, 0 to 3 percent slopes	3,703	0.1
223	Youngston loam, well drained, 0 to 3 percent slopes	2,532	*
224	Zillion-Barkelew, moist-Grapit complex, 25 to 65 percent slopes, extremely stony	8,256	0.3
225	Abracon-Solirec complex, 3 to 8 percent slopes	8	*
226	Arches-Mespun-Rock outcrop complex, 4 to 40 percent slopes	166	*
227	Bankard family-Cameo complex, 0 to 5 percent slopes	114	*
228	Bondman-Rock outcrop complex, 5 to 40 percent slopes	962	*
229	Cameo loamy fine sand, 0 to 5 percent slopes	47	*
230	Cragnot-Pensore-Grapit association, 6 to 75 percent slopes, very stony	858	*
231	Green River-Fluvaquents complex, 0 to 2 percent slopes	74	*
232	Lakebench-Strell complex, 5 to 30 percent slopes	407	*
233	Lakebench-Yampa complex, 5 to 30 percent slopes, very stony	281	*
234	Mantlemine loam, 1 to 8 percent slopes	75	*
235	Mantlemine-Emlin complex, 1 to 12 percent slopes	792	*
236	Mido loamy fine sand, 3 to 12 percent slopes	320	*
237	Mikim complex, 1 to 4 percent slopes	146	*
238	Milok fine sandy loam, 3 to 8 percent slopes	130	*
239	Milok-Solirec-Strych complex, 10 to 65 percent slopes, very stony	167	*
240	Milok-Strych complex, 3 to 25 percent slopes, very stony	136	*
241	Pensore-Roto complex, 3 to 45 percent slopes, very stony	47	*
242	Riverwash	16	*
243	Rizno-Windcomb-Anasazi complex, 3 to 25 percent slopes, extremely flaggy-	126	*
244	Rock outcrop-Hackling complex, 10 to 45 percent slopes, very stony	3,107	0.1

See footnote at end of table.

Table 4.--Acreage and proportionate extent of the soils--Continued

Map symbol	Soil name	Acres	Percent
245	Rock outcrop, Torriorthents, and Ustorthents soils, 25 to 75 percent slopes, rubbly	6,729	0.2
246	Schoonover-Duffymont complex, 3 to 25 percent slopes, rubbly	2,683	*
247	Stout-Rock outcrop complex, 5 to 35 percent slopes, very stony	938	*
248	Strych-Mellenthin complex, 3 to 45 percent slopes, very bouldery	261	*
249	Zillion-Yampa-Clyl complex, 25 to 65 percent slopes, extremely flaggy	321	*
250	Abracon loam, 3 to 8 percent slopes	120	*
251	Badland-Renegade complex, 50 to 80 percent slopes	1,726	*
252	Bigtom-Namlot-Dokie association, 15 to 50 percent slopes	605	*
253	Clapper gravelly loam, 2 to 25 percent slopes	84	*
254	Cliff sandy loam, 2 to 4 percent slopes	844	*
255	Clyl-Pinerid association, 8 to 40 percent slopes	1,116	*
256	Cortyzack-Diagulch complex, 3 to 25 percent slopes	10	*
257	Cortyzack-Duffymont complex, 3 to 25 percent slopes, rubbly	2,865	0.1
258	Cortyzack-Flynncove association, 3 to 25 percent slopes	502	*
259	Denco-Gerst complex, 4 to 40 percent slopes	1,999	*
260	Dokie-Flynncove association, 25 to 50 percent slopes	2,134	*
261	Dokie-Namlot association, 15 to 70 percent slopes	313	*
262	Gompers very channery silt loam, 4 to 25 percent slopes	74	*
263	Hanksville silty clay loam, 2 to 25 percent slopes	57	*
264	Mikim loam, 3 to 15 percent slopes	541	*
265	Mikim silt loam, sodic, 1 to 4 percent slopes	26	*
266	Rock outcrop-Boxring-Tridell complex, 10 to 50 percent slopes	2,873	0.1
267	Solirec-Abracon-Begay complex, 2 to 15 percent slopes	1,421	*
268	Toliver-Rock outcrop association, 50 to 80 percent slopes	68	*
269	Walknolls-Badland-Rock outcrop complex, 25 to 50 percent slopes	215	*
270	Walknolls-Gilston association, 2 to 25 percent slopes	260	*
271	Water	9,867	0.3
	Total	2,842,000	100.0

* Less than 0.1 percent.

Table 5.--Land capability and yields per acre of crops and pasture

(Yields in the "N" columns are for nonirrigated areas; those in the "I" columns are for irrigated areas. Yields are those that can be expected under a high level of management. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil.)

Map symbol and soil name	Land capability		Grass hay		Pasture		Winter wheat	
	N	I	N	I	N	I	N	I
			Tons	Tons	AUM	AUM	Bu	Bu
1:								
Abor	6e	---	---	---	---	---	---	---
2:								
Abor	7e	---	---	---	---	---	---	---
3:								
Adderton	6c	---	---	1.50	---	---	---	---
4:								
Almy	4e	---	---	---	---	---	---	---
5:								
Apmay	4c	4c	---	3.00	---	---	---	---
6:								
Avalon	6c	---	---	---	---	---	---	---
Mack	6c	---	---	---	---	---	---	---
7:								
Avalon	6c	---	---	---	---	---	---	---
Persayo, moist	6e	---	---	---	---	---	---	---
Degater	6e	---	---	---	---	---	---	---
8:								
Badland	8	---	---	---	---	---	---	---
9:								
Baroid	6c	4s	---	3.00	---	---	---	---
Eghelm	6c	4s	---	2.50	---	---	---	---
10:								
Battlement	4c	4c	---	2.50	---	6.00	---	---
11:								
Battlement, saline	6s	---	---	---	---	---	---	---
12:								
Berlake	4e	---	---	---	---	---	20.00	---
13:								
Berlake	6e	---	---	---	---	---	15.00	---
14:								
Berlake	4e	---	---	---	---	---	20.00	---
Maysprings	4e	---	---	---	---	---	18.00	---
15:								
Berlake	6e	---	---	---	---	---	---	---
Taffom	6e	---	---	---	---	---	15.00	---
Gretdivid	6e	---	---	---	---	---	15.00	---

Table 5.--Land capability and yields per acre of crops and pasture--Continued

Map symbol and soil name	Land capability		Grass hay		Pasture		Winter wheat	
	N	I	N	I	N	I	N	I
			Tons	Tons	AUM	AUM	Bu	Bu
16:								
Bilhil	4c	4c	---	2.50	---	---	---	---
17:								
Binco	7e	---	---	---	---	---	---	---
18:								
Boltus	7s	---	---	---	---	---	---	---
Beamton	6e	---	---	---	---	---	---	---
19:								
Borollic Natrargids	7s	---	---	---	---	---	---	---
Borollic Haplargids	6e	---	---	---	---	---	---	---
Ustic Torrifluvents	4c	---	---	---	---	---	---	---
20:								
Brownsto	6e	---	---	---	---	---	---	---
Castee	6e	---	---	---	---	---	---	---
21:								
Bulkley	6e	---	---	---	---	---	---	---
22:								
Bulkley	4e	---	---	---	---	---	25.00	---
23:								
Bulkley	6e	---	---	---	---	---	18.00	---
24:								
Bulkley	7e	---	---	---	---	---	---	---
Quilt	7e	---	---	---	---	---	---	---
25:								
Campspass	4e	---	---	---	---	---	---	---
26:								
Campspass	6e	---	---	---	---	---	---	---
27:								
Canlodore	7e	---	---	---	---	---	---	---
28:								
Carbol	6e	---	---	---	---	---	---	---
Irigul	6e	---	---	---	---	---	---	---
Rock outcrop	8	---	---	---	---	---	---	---
29:								
Carbol	6e	---	---	---	---	---	---	---
Miracle	6e	---	---	---	---	---	---	---
30:								
Carmody	6e	---	---	---	---	---	---	---
Rock River	4e	---	---	---	---	---	20.00	---

Table 5.--Land capability and yields per acre of crops and pasture--Continued

Map symbol and soil name	Land capability		Grass hay		Pasture		Winter wheat	
	N	I	N	I	N	I	N	I
			Tons	Tons	AUM	AUM	Bu	Bu
30:								
Crestman	6e	---	---	---	---	---	---	---
31:								
Castee	6c	---	---	---	---	---	---	---
32:								
Chroder	6e	---	---	---	---	---	---	---
33:								
Clayburn, warm	6e	---	---	---	---	---	---	---
34:								
Clayburn	7e	---	---	---	---	---	---	---
Foidel	7e	---	---	---	---	---	---	---
35:								
Clayburn	7e	---	---	---	---	---	---	---
Youga, moist	7e	---	---	---	---	---	---	---
36:								
Clifsand	6e	---	---	---	---	---	---	---
Chroder	6e	---	---	---	---	---	---	---
37:								
Cochetopa	6e	---	---	---	---	---	---	---
38:								
Cochetopa	7e	---	---	---	---	---	---	---
39:								
Cochetopa, warm	6c	---	---	---	---	---	---	---
40:								
Cochetopa	6c	---	---	---	---	---	---	---
Gothic	7s	---	---	---	---	---	---	---
41:								
Cochetopa	7e	---	---	---	---	---	---	---
Gothic	7e	---	---	---	---	---	---	---
42:								
Cochetopa	6c	---	---	---	---	---	---	---
Jerry	6s	---	---	---	---	---	---	---
43:								
Coldspring, moist	6c	---	---	---	---	---	---	---
44:								
Cowestglen	4c	4c	---	2.50	---	---	---	---
45:								
Coyet	6e	---	---	---	---	---	---	---
46:								
Coyet	6e	---	---	---	---	---	---	---

Table 5.--Land capability and yields per acre of crops and pasture--Continued

Map symbol and soil name	Land capability		Grass hay		Pasture		Winter wheat	
	N	I	N	I	N	I	N	I
			Tons	Tons	AUM	AUM	Bu	Bu
47:								
Coyet	7e	---	---	---	---	---	---	---
Crestman, moist	7e	---	---	---	---	---	---	---
48:								
Crago	7e	---	---	---	---	---	---	---
Pensore	7e	---	---	---	---	---	---	---
Grapit	7e	---	---	---	---	---	---	---
49:								
Cryoborolls, slumped	7e	---	---	---	---	---	---	---
50:								
Cushool	4e	---	---	---	---	---	---	---
51:								
Cushool	6e	---	---	---	---	---	---	---
52:								
Danavore	6e	---	---	---	---	---	---	---
Waybe	6e	---	---	---	---	---	---	---
53:								
Davtone	6e	---	---	---	---	---	---	---
Forsey	6e	---	---	---	---	---	---	---
54:								
Deaver	7e	---	---	---	---	---	---	---
Avalon	6c	---	---	---	---	---	---	---
55:								
Deaver	7e	---	---	---	---	---	---	---
Chipeta	7e	---	---	---	---	---	---	---
56:								
Debone	7s	---	---	---	---	---	---	---
57:								
Detra	4e	---	---	---	---	---	---	---
Cortyzack	4e	---	---	---	---	---	---	---
58:								
Diaflats	6c	---	---	---	---	---	---	---
Fondillas	7s	---	---	---	---	---	---	---
59:								
Dranyon	6e	---	---	---	---	---	---	---
60:								
Dumps, mine	8	---	---	---	---	---	---	---
61:								
Ecklund	6e	---	---	---	---	---	---	---

Table 5.--Land capability and yields per acre of crops and pasture--Continued

Map symbol and soil name	Land capability		Grass hay		Pasture		Winter wheat	
	N	I	N	I	N	I	N	I
			Tons	Tons	AUM	AUM	Bu	Bu
61:								
Tipperary	6e	---	---	---	---	---	---	---
62:								
Eghelm	6c	4c	---	3.00	---	---	---	---
63:								
Eghelm, moist	6c	4c	---	3.00	---	---	---	---
64:								
Emlin	4e	---	---	---	---	---	---	---
65:								
Emlin	4e	---	---	---	---	---	---	---
Tymosling	6s	---	---	---	---	---	---	---
66:								
Evanot	4e	---	---	---	---	---	30.00	---
67:								
Evanot	6e	---	---	---	---	---	25.00	---
68:								
Evanot	6e	---	---	---	---	---	30.00	---
Yamo	6e	---	---	---	---	---	20.00	---
69:								
Fenster	6c	---	---	---	---	---	---	---
Thenipel	6c	---	---	---	---	---	---	---
70:								
Fluvaquents, frequently flooded	6w	---	---	---	---	---	---	---
Haplaquolls, frequently flooded	6w	---	---	---	---	---	---	---
71:								
Flygare, dry	7e	---	---	---	---	---	---	---
72:								
Foidel, cool	6e	---	---	---	---	---	---	---
73:								
Foidel	7e	---	---	---	---	---	---	---
74:								
Foidel, moist	6e	---	---	---	---	---	---	---
Flygare	6e	---	---	---	---	---	---	---
Skyway, moist	6e	---	---	---	---	---	---	---
75:								
Fonce	6c	---	---	---	---	---	---	---
76:								
Fonce	6s	---	---	---	---	---	---	---

Table 5.--Land capability and yields per acre of crops and pasture--Continued

Map symbol and soil name	Land capability		Grass hay		Pasture		Winter wheat	
	N	I	N	I	N	I	N	I
			Tons	Tons	AUM	AUM	Bu	Bu
77:								
Forelle	4e	---	---	---	---	---	---	---
78:								
Forelle	6e	---	---	---	---	---	---	---
79:								
Forelle	4e	---	---	---	---	---	---	---
Evanot	4e	---	---	---	---	---	30.00	---
80:								
Forelle	6e	---	---	---	---	---	---	---
Evanot	6e	---	---	---	---	---	25.00	---
81:								
Forelle	4c	---	---	---	---	---	---	---
Obadia	4s	---	---	---	---	---	15.00	---
82:								
Forelle	6e	---	---	---	---	---	---	---
Pinelli	6e	---	---	---	---	---	20.00	---
Maysprings	6e	---	---	---	---	---	15.00	---
83:								
Forsey	6e	---	---	---	---	---	---	---
Libeg	6e	---	---	---	---	---	---	---
84:								
Gebson, moist	7s	---	---	---	---	---	---	---
Youga	6e	---	---	---	---	---	---	---
85:								
Giarch	7s	---	---	---	---	---	---	---
86:								
Gracot	6e	---	---	---	---	---	---	---
Maybell	6e	---	---	---	---	---	---	---
87:								
Gretdivid	6e	---	---	---	---	---	15.00	---
Taffom	6e	---	---	---	---	---	15.00	---
Abor	6e	---	---	---	---	---	---	---
88:								
Grieves	4e	---	---	---	---	---	---	---
89:								
Grieves	6e	---	---	---	---	---	---	---
90:								
Grieves	7e	---	---	---	---	---	---	---
Crestman	7e	---	---	---	---	---	---	---

Table 5.--Land capability and yields per acre of crops and pasture--Continued

Map symbol and soil name	Land capability		Grass hay		Pasture		Winter wheat	
	N	I	N	I	N	I	N	I
			Tons	Tons	AUM	AUM	Bu	Bu
91:								
Grieves	6e	---	---	---	---	---	---	---
Yamo	4e	---	---	---	---	---	20.00	---
Crestman	7e	---	---	---	---	---	---	---
92:								
Grimm	7e	---	---	---	---	---	---	---
Ustic Torriorthents, shallow	7e	---	---	---	---	---	---	---
93:								
Gullied land	---	---	---	---	---	---	---	---
94:								
Hapney, moist	6s	---	---	---	---	---	---	---
95:								
Haterton	6s	---	---	---	---	---	---	---
Piezon	6c	---	---	---	---	---	---	---
96:								
Heathcoat	6s	---	---	---	---	---	---	---
97:								
Heathcoat	6e	---	---	---	---	---	---	---
Clayburn	6e	---	---	---	---	---	---	---
98:								
Herm	7s	---	---	---	---	---	---	---
Fughes	7s	---	---	---	---	---	---	---
99:								
Hesperus, dry	4e	---	---	---	---	---	35.00	---
100:								
Hesperus	7e	---	---	---	---	---	---	---
101:								
Hesperus	6e	---	---	---	---	---	---	---
102:								
Holter	6s	---	---	---	---	---	---	---
Detra	4c	---	---	---	---	---	---	---
103:								
Iles	4e	---	---	---	---	---	---	---
104:								
Ironco	7e	---	---	---	---	---	---	---
Mulgon, dry	7e	---	---	---	---	---	---	---
105:								
Ironsprings	4e	---	---	---	---	---	18.00	---

Table 5.--Land capability and yields per acre of crops and pasture--Continued

Map symbol and soil name	Land capability		Grass hay		Pasture		Winter wheat	
	N	I	N	I	N	I	N	I
			Tons	Tons	AUM	AUM	Bu	Bu
106:								
Ironsprings	6e	---	---	---	---	---	15.00	---
107:								
Ironsprings	6e	---	---	---	---	---	15.00	---
Maysprings	6e	---	---	---	---	---	15.00	---
Gretdivid	6e	---	---	---	---	---	15.00	---
108:								
Jerry	6e	---	---	---	---	---	---	---
Cochetopa	6e	---	---	---	---	---	---	---
109:								
Joebas	7e	---	---	---	---	---	---	---
Rock outcrop	8	---	---	---	---	---	---	---
110:								
Kemmerer	6e	---	---	---	---	---	---	---
111:								
Kemmerer	7e	---	---	---	---	---	---	---
Grapit	7e	---	---	---	---	---	---	---
112:								
Kemmerer	7e	---	---	---	---	---	---	---
Moyerson	7e	---	---	---	---	---	---	---
113:								
Kemmerer	6e	---	---	---	---	---	---	---
Yamo	6e	---	---	---	---	---	15.00	---
114:								
Lamphier	6e	---	---	---	---	---	---	---
115:								
Lamphier	7e	---	---	---	---	---	---	---
116:								
Lamphier	6e	---	---	---	---	---	---	---
Jerry	6e	---	---	---	---	---	---	---
117:								
Lamphier	7e	---	---	---	---	---	---	---
Jerry	7e	---	---	---	---	---	---	---
118:								
Lander	4c	4c	---	2.50	---	---	---	---
119:								
Langspring	6e	---	---	---	---	---	---	---
120:								
Layoint	4e	---	---	---	---	---	---	---

Table 5.--Land capability and yields per acre of crops and pasture--Continued

Map symbol and soil name	Land capability		Grass hay		Pasture		Winter wheat	
	N	I	N	I	N	I	N	I
			Tons	Tons	AUM	AUM	Bu	Bu
120:								
Moosed	7s	---	---	---	---	---	---	---
Berlake	4e	---	---	---	---	---	15.00	---
121:								
Leaps	6c	---	---	---	---	---	---	---
122:								
Leswill	7s	---	---	---	---	---	---	---
Rogrube	6e	---	---	---	---	---	---	---
123:								
Lilsnake	6e	---	---	---	---	---	---	---
Sandwash	6e	---	---	---	---	---	---	---
124:								
Losee	7e	---	---	---	---	---	---	---
Thornburgh, dry	7e	---	---	---	---	---	---	---
125:								
Massadona	6c	---	---	---	---	---	---	---
126:								
Massadona	6c	---	---	---	---	---	---	---
Youngston, moist	6e	4c	---	3.00	---	---	---	---
127:								
Maudlin	4e	---	---	---	---	---	---	---
Duffymont	7s	---	---	---	---	---	---	---
128:								
Maybell	6e	---	---	---	---	---	---	---
129:								
Maybell	7e	---	---	---	---	---	---	---
130:								
Maysprings	4c	---	---	---	---	---	18.00	---
131:								
Maysprings	6e	---	---	---	---	---	15.00	---
Gretdivid	6e	---	---	---	---	---	15.00	---
132:								
Milren	4e	---	---	---	---	---	25.00	---
133:								
Miracle	6e	---	---	---	---	---	---	---
Coldspring	6e	---	---	---	---	---	---	---
134:								
Morapos	4e	4e	---	2.50	---	---	35.00	---
135:								
Morapos	6e	---	---	---	---	---	25.00	---

Table 5.--Land capability and yields per acre of crops and pasture--Continued

Map symbol and soil name	Land capability		Grass hay		Pasture		Winter wheat	
	N	I	N	I	N	I	N	I
			Tons	Tons	AUM	AUM	Bu	Bu
136:								
Morapos	4e	4e	---	2.50	---	---	35.00	---
Pagoda	4e	4e	---	3.00	---	---	32.00	---
137:								
Morset	6c	---	---	---	---	---	---	---
Youga	6c	---	---	---	---	---	---	---
138:								
Moyerson	7e	---	---	---	---	---	---	---
Rentsac	7e	---	---	---	---	---	---	---
139:								
Muggins	6e	---	---	---	---	---	---	---
140:								
Ninot	7e	---	---	---	---	---	---	---
Crago	7e	---	---	---	---	---	---	---
Garlips	7e	---	---	---	---	---	---	---
141:								
Nortez, cool	4e	---	---	---	---	---	---	---
Morapos	4e	4e	---	2.50	---	---	35.00	---
142:								
Nortez, cool	6e	---	---	---	---	---	---	---
Morapos	6e	---	---	---	---	---	25.00	---
143:								
Nunemaker	4e	---	---	---	---	---	25.00	---
144:								
Pagoda	6e	---	---	---	---	---	---	---
145:								
Pagoda	4e	4e	---	3.00	---	---	32.00	---
146:								
Pavillion	6e	---	---	---	---	---	---	---
Degater	6e	---	---	---	---	---	---	---
147:								
Peeler	6e	---	---	---	---	---	---	---
148:								
Pilotpeak	6s	---	---	---	---	---	---	---
Grubrob	6c	---	---	---	---	---	---	---
149:								
Pinelli	4e	4e	---	---	---	---	20.00	---
150:								
Pinelli	4e	---	---	---	---	---	20.00	---

Table 5.--Land capability and yields per acre of crops and pasture--Continued

Map symbol and soil name	Land capability		Grass hay		Pasture		Winter wheat	
	N	I	N	I	N	I	N	I
			Tons	Tons	AUM	AUM	Bu	Bu
151:								
Pinelli, dry	6c	---	---	---	---	---	20.00	---
152:								
Pinridge	4c	---	---	---	---	---	---	---
153:								
Pricecreek	6s	---	---	---	---	---	---	---
154:								
Quealman	6e	---	---	---	---	---	---	---
155:								
Rencot	7s	---	---	---	---	---	---	---
Duffymont	7s	---	---	---	---	---	---	---
156:								
Rentsac	7e	---	---	---	---	---	---	---
157:								
Rentsac	7e	---	---	---	---	---	---	---
Moyerson	7e	---	---	---	---	---	---	---
158:								
Rock outcrop	8	---	---	---	---	---	---	---
Earsman	8	---	---	---	---	---	---	---
159:								
Rock outcrop	8	---	---	---	---	---	---	---
Haploborolls	7e	---	---	---	---	---	---	---
160:								
Rock outcrop	8	---	---	---	---	---	---	---
Torriorthents	8	---	---	---	---	---	---	---
161:								
Rock River	4c	4c	---	3.00	---	---	20.00	---
162:								
Rock River	4e	---	---	---	---	---	20.00	---
163:								
Rock River	6e	---	---	---	---	---	15.00	---
164:								
Rock River	6e	---	---	---	---	---	20.00	---
Taffom	6e	---	---	---	---	---	20.00	---
165:								
Rogrube sandy loam	7e	---	---	---	---	---	---	---
Rogrube clay loam	6e	---	---	---	---	---	---	---
166:								
Routt	6e	---	---	---	---	---	---	---

Table 5.--Land capability and yields per acre of crops and pasture--Continued

Map symbol and soil name	Land capability		Grass hay		Pasture		Winter wheat	
	N	I	N	I	N	I	N	I
			Tons	Tons	AUM	AUM	Bu	Bu
167:								
Routt	6e	---	---	---	---	---	---	---
Cochetopa	6e	---	---	---	---	---	---	---
Binco	6e	---	---	---	---	---	---	---
168:								
Ruedloff	7e	---	---	---	---	---	---	---
169:								
Ruedloff	6e	---	---	---	---	---	---	---
Dunul	6e	---	---	---	---	---	---	---
170:								
Ryan Park	4e	---	---	---	---	---	---	---
171:								
Ryan Park	4c	4c	---	3.00	---	---	---	---
172:								
Ryan Park	6e	---	---	---	---	---	---	---
Coyet	6e	---	---	---	---	---	---	---
173:								
Ryark	4e	---	---	---	---	---	---	---
Powderwash	4e	---	---	---	---	---	---	---
174:								
Ryark	4e	---	---	---	---	---	---	---
Maybell	6e	---	---	---	---	---	---	---
175:								
Sandwash	6e	---	---	---	---	---	---	---
Langspring	6e	---	---	---	---	---	---	---
Baston	7s	---	---	---	---	---	---	---
176:								
Schooner	7s	---	---	---	---	---	---	---
Rock outcrop	8	---	---	---	---	---	---	---
177:								
Schooner	7s	---	---	---	---	---	---	---
Tricera	6e	---	---	---	---	---	---	---
178:								
Simanni	6c	---	---	---	---	---	---	---
Ruedloff	6e	---	---	---	---	---	---	---
179:								
Skyway, dry	7e	---	---	---	---	---	---	---
180:								
Spool	7s	---	---	---	---	---	---	---

Table 5.--Land capability and yields per acre of crops and pasture--Continued

Map symbol and soil name	Land capability		Grass hay		Pasture		Winter wheat	
	N	I	N	I	N	I	N	I
			Tons	Tons	AUM	AUM	Bu	Bu
180:								
Maybell	6e	---	---	---	---	---	---	---
181:								
Stunner	4c	---	---	---	---	---	---	---
182:								
Stunner, moist	4e	---	---	---	---	---	---	---
Emlin	4e	---	---	---	---	---	---	---
183:								
Styers	6e	---	---	---	---	---	15.00	---
Ironsprings	6e	---	---	---	---	---	15.00	---
Maysprings	6e	---	---	---	---	---	15.00	---
184:								
Styers	6e	---	---	---	---	---	15.00	---
Pinelli	6e	---	---	---	---	---	20.00	---
Taffom	6e	---	---	---	---	---	15.00	---
185:								
Taffom	4e	---	---	---	---	---	20.00	---
186:								
Talamantes	6c	---	---	---	---	---	---	---
187:								
Talamantes	6e	---	---	---	---	---	---	---
188:								
Talamantes, saline	7s	---	---	---	---	---	---	---
189:								
Tipper	7e	---	---	---	---	---	---	---
Crustown	7e	---	---	---	---	---	---	---
190:								
Tipperary	6e	---	---	---	---	---	---	---
191:								
Tipperary	6e	---	---	---	---	---	---	---
192:								
Tipperary	6e	---	---	---	---	---	---	---
Willwood	6e	---	---	---	---	---	---	---
193:								
Tisworth	7s	---	---	---	---	---	---	---
194:								
Tolman	7s	---	---	---	---	---	---	---
Duffymont	7s	---	---	---	---	---	---	---
195:								
Torriorthents	7s	---	---	---	---	---	---	---

Table 5.--Land capability and yields per acre of crops and pasture--Continued

Map symbol and soil name	Land capability		Grass hay		Pasture		Winter wheat	
	N	I	N	I	N	I	N	I
			Tons	Tons	AUM	AUM	Bu	Bu
196:								
Torriorthents	7s	---	---	---	---	---	---	---
Baston	7s	---	---	---	---	---	---	---
197:								
Torriorthents	7e	---	---	---	---	---	---	---
Rock outcrop, sandstone	8	---	---	---	---	---	---	---
198:								
Torriorthents	7e	---	---	---	---	---	---	---
Rock outcrop, shale	8	---	---	---	---	---	---	---
199:								
Torriorthents	7e	---	---	---	---	---	---	---
Torripsamments	7e	---	---	---	---	---	---	---
200:								
Tresano	6c	---	---	---	---	---	---	---
201:								
Tresano	6c	---	---	---	---	---	---	---
Hiatha	7s	---	---	---	---	---	---	---
Kandaly	6e	---	---	---	---	---	---	---
202:								
Turzo	6c	---	---	---	---	---	---	---
203:								
Turzo, saline	6c	---	---	---	---	---	---	---
204:								
Typic Natrargids	7s	---	---	---	---	---	---	---
205:								
Uffens	7s	---	---	---	---	---	---	---
206:								
Ustorthents, frigid	7e	---	---	---	---	---	---	---
Borolls	7e	---	---	---	---	---	---	---
207:								
Vermillion	6e	---	---	---	---	---	---	---
Langspring	6e	---	---	---	---	---	---	---
208:								
Wallson	6e	---	---	---	---	---	---	---
Tricera	6e	---	---	---	---	---	---	---
209:								
Weed	4c	---	---	---	---	---	30.00	---
210:								
Willwood	6e	---	---	---	---	---	---	---

Table 5.--Land capability and yields per acre of crops and pasture--Continued

Map symbol and soil name	Land capability		Grass hay		Pasture		Winter wheat	
	N	I	N	I	N	I	N	I
			Tons	Tons	AUM	AUM	Bu	Bu
210:								
Sheppard, cool	6e	---	---	---	---	---	---	---
211:								
Willwood	7e	---	---	---	---	---	---	---
Tipperary	7e	---	---	---	---	---	---	---
212:								
Willwood	6e	---	---	---	---	---	---	---
Tipperary, cobbly substratum	6e	---	---	---	---	---	---	---
213:								
Winevada	6e	---	---	---	---	---	---	---
Splitro	6e	---	---	---	---	---	---	---
214:								
Winevada	7e	---	---	---	---	---	---	---
Splitro	7e	---	---	---	---	---	---	---
215:								
Winkleman	6c	---	---	---	---	---	---	---
216:								
Yamo	4e	---	---	---	---	---	20.00	---
217:								
Yamo	6e	---	---	---	---	---	15.00	---
218:								
Yellowwash	6s	---	---	---	---	---	---	---
Piezon	4e	---	---	---	---	---	---	---
219:								
Youga	6c	---	---	---	---	---	---	---
220:								
Youga	6c	---	---	---	---	---	---	---
Dinnen	6c	---	---	---	---	---	---	---
221:								
Youga	7e	---	---	---	---	---	---	---
Gelkie	7e	---	---	---	---	---	---	---
Clayburn, warm	7e	---	---	---	---	---	---	---
222:								
Youngston, cool	6c	4c	---	3.00	---	---	---	---
223:								
Youngston, well drained	6e	4c	---	3.00	---	---	---	---
224:								
Zillion	7e	---	---	---	---	---	---	---

Table 5.--Land capability and yields per acre of crops and pasture--Continued

Map symbol and soil name	Land capability		Grass hay		Pasture		Winter wheat	
	N	I	N	I	N	I	N	I
			Tons	Tons	AUM	AUM	Bu	Bu
224:								
Barkelew, moist	7e	---	---	---	---	---	---	---
Grapit	7e	---	---	---	---	---	---	---
225:								
Abracon	7e	3e	---	---	---	11.00	---	---
Solirec	7e	---	---	---	---	---	---	---
226:								
Arches	7e	---	---	---	---	---	---	---
Mespun	7e	---	---	---	---	---	---	---
Rock outcrop	8	---	---	---	---	---	---	---
227:								
Bankard family	4c	---	---	---	---	---	---	---
Cameo	4c	---	---	---	---	---	---	---
228:								
Bondman	6e	---	---	---	---	---	---	---
Rock outcrop	8	---	---	---	---	---	---	---
229:								
Cameo	4c	---	---	---	---	---	---	---
230:								
Cragnot	7e	---	---	---	---	---	---	---
Pensore	7e	---	---	---	---	---	---	---
Grapit	7e	---	---	---	---	---	---	---
231:								
Green River	7w	4w	---	---	2.00	9.00	---	---
Fluvaquents	6w	---	---	---	---	---	---	---
232:								
Lakebench	6e	---	---	---	---	---	---	---
Strell	7s	---	---	---	---	---	---	---
233:								
Lakebench	6e	---	---	---	---	---	---	---
Yampa	6e	---	---	---	---	---	---	---
234:								
Mantlemine	4c	---	---	---	---	---	---	---
235:								
Mantlemine	4e	---	---	---	---	---	---	---
Emlin	4e	---	---	---	---	---	---	---
236:								
Mido	4e	---	---	---	---	---	---	---

Table 5.--Land capability and yields per acre of crops and pasture--Continued

Map symbol and soil name	Land capability		Grass hay		Pasture		Winter wheat	
	N	I	N	I	N	I	N	I
			Tons	Tons	AUM	AUM	Bu	Bu
237:								
Mikim loam	7e	3e	---	---	---	12.00	---	---
Mikim silt loam	7e	---	---	---	---	---	---	---
238:								
Milok	4e	---	---	---	---	---	---	---
239:								
Milok	7e	---	---	---	---	---	---	---
Solirec	7e	---	---	---	---	---	---	---
Strych	7e	---	---	---	---	---	---	---
240:								
Milok	7e	---	---	---	---	---	---	---
Strych	7s	---	---	---	---	---	---	---
241:								
Pensore	7s	---	---	---	---	---	---	---
Roto	7s	---	---	---	---	---	---	---
242:								
Riverwash	8	---	---	---	---	---	---	---
243:								
Rizno	7s	---	---	---	---	---	---	---
Windcomb	7s	---	---	---	---	---	---	---
Anasazi	6e	---	---	---	---	---	---	---
244:								
Rock outcrop	8	---	---	---	---	---	---	---
Hackling	7e	---	---	---	---	---	---	---
245:								
Rock outcrop	8	---	---	---	---	---	---	---
Torriorthents	7e	---	---	---	---	---	---	---
Ustorthents	7e	---	---	---	---	---	---	---
246:								
Schoonover	6e	---	---	---	---	---	---	---
Duffymont	7s	---	---	---	---	---	---	---
247:								
Stout	7s	---	---	---	---	---	---	---
Rock outcrop	8	---	---	---	---	---	---	---
248:								
Strych	6e	---	---	---	---	---	---	---
Mellenthin	7s	---	---	---	---	---	---	---

Table 5.--Land capability and yields per acre of crops and pasture--Continued

Map symbol and soil name	Land capability		Grass hay		Pasture		Winter wheat	
	N	I	N	I	N	I	N	I
			Tons	Tons	AUM	AUM	Bu	Bu
249:								
Zillion	7e	---	---	---	---	---	---	---
Yampa	7e	---	---	---	---	---	---	---
Clyl	7e	---	---	---	---	---	---	---
250:								
Abracon	7e	3e	---	---	---	11.00	---	---
251:								
Badland	8	---	---	---	---	---	---	---
Renegade	7e	---	---	---	---	---	---	---
252:								
Bigtom	7e	---	---	---	---	---	---	---
Namlot	7e	---	---	---	---	---	---	---
Dokie	7e	---	---	---	---	---	---	---
253:								
Clapper	7e	---	---	---	---	---	---	---
254:								
Cliff	7e	2e	---	---	---	13.00	---	---
255:								
Clyl	6e	---	---	---	---	---	---	---
Pinerid	7e	---	---	---	---	---	---	---
256:								
Cortyzack	6e	---	---	---	---	---	---	---
Diagulch	4e	---	---	---	---	---	---	---
257:								
Cortyzack	6e	---	---	---	---	---	---	---
Duffymont	7s	---	---	---	---	---	---	---
258:								
Cortyzack	6e	---	---	---	---	---	---	---
Flynncove	6e	---	---	---	---	---	---	---
259:								
Denco	7e	---	---	---	---	---	---	---
Gerst	7e	---	---	---	---	---	---	---
260:								
Dokie	7e	---	---	---	---	---	---	---
Flynncove	7e	---	---	---	---	---	---	---
261:								
Dokie	7e	---	---	---	---	---	---	---
Namlot	7e	---	---	---	---	---	---	---

Table 5.--Land capability and yields per acre of crops and pasture--Continued

Map symbol and soil name	Land capability		Grass hay		Pasture		Winter wheat	
	N	I	N	I	N	I	N	I
			Tons	Tons	AUM	AUM	Bu	Bu
262:								
Gompers	7e	---	---	---	---	---	---	---
263:								
Hanksville	7e	---	---	---	---	---	---	---
264:								
Mikim	7e	---	---	---	---	---	---	---
265:								
Mikim	7e	---	---	---	---	---	---	---
266:								
Rock outcrop	8	---	---	---	---	---	---	---
Boxring	7e	---	---	---	---	---	---	---
Tridell	7e	---	---	---	---	---	---	---
267:								
Solirec	7e	---	---	---	---	---	---	---
Abracon	7e	---	---	---	---	---	---	---
Begay	7e	---	---	---	---	---	---	---
268:								
Toliver	8	---	---	---	---	---	---	---
Rock outcrop	8	---	---	---	---	---	---	---
269:								
Walknolls	7s	---	---	---	---	---	---	---
Badland	8	---	---	---	---	---	---	---
Rock outcrop	8	---	---	---	---	---	---	---
270:								
Walknolls	7s	---	---	---	---	---	---	---
Gilston	7e	---	---	---	---	---	---	---
271:								
Water	---	---	---	---	---	---	---	---

Table 6.--Prime farmland

(Only the soils considered prime farmland are listed. Urban or built-up areas of the soils listed are not considered prime farmland. If a soil is prime farmland only under certain conditions, the conditions are specified in parentheses after the soil name.)

Map symbol	Soil name
10	Battlement fine sandy loam, 0 to 3 percent slopes (Prime farmland if irrigated)
11	Battlement silt loam, saline, 0 to 3 percent slopes (Prime farmland if irrigated and reclaimed of excess salts and sodium)
66	Evanot loam, 1 to 12 percent slopes (Prime farmland if irrigated)
125	Massadona silty clay loam, 0 to 12 percent slopes (Prime farmland if irrigated)
126	Massadona-Youngston moist, complex, 1 to 8 percent slopes (Prime farmland if irrigated)
161	Rock River sandy loam, 0 to 3 percent slopes (Prime farmland if irrigated)
171	Ryan Park sandy loam, 0 to 3 percent slopes (Prime farmland if irrigated)
202	Turzo loam, 0 to 5 percent slopes (Prime farmland if irrigated)
203	Turzo loam, saline, 1 to 8 percent slopes (Prime farmland if irrigated and reclaimed of excess salts and sodium)
209	Weed sandy loam, 1 to 12 percent slopes (Prime farmland if irrigated)
215	Winkleman clay loam, 0 to 3 percent slopes (Prime farmland if irrigated)
222	Youngston loam, cool, 0 to 3 percent slopes (Prime farmland if irrigated)
223	Youngston loam, well drained, 0 to 3 percent slopes (Prime farmland if irrigated)
254	Cliff sandy loam, 2 to 4 percent slopes (Prime farmland if irrigated)

Table 7.--Ecological sites and characteristic native vegetation

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Rangeland	Forest		
			Lb/acre		Pct.	Pct.		
1:								
Abor----------	Clayey Foothills	Favorable	1,200	western wheatgrass	30		---	---
		Normal	900	Wyoming big sagebrush	15			
		Unfavorable	600	Sandberg bluegrass	5			
				bluebunch wheatgrass	5			
				bottlebrush squirreltail	5			
				green needlegrass	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
2:								
Abor----------	Clayey Foothills	Favorable	1,200	western wheatgrass	30		---	---
		Normal	900	Wyoming big sagebrush	15			
		Unfavorable	600	Sandberg bluegrass	5			
				bluebunch wheatgrass	5			
				bottlebrush squirreltail	5			
				green needlegrass	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
3:								
Adderton--------	Mountain Swale	Favorable	3,000	basin wildrye	35		---	---
		Normal	2,500	slender wheatgrass	10			
		Unfavorable	2,000	western wheatgrass	10			
				Letterman's needlegrass	5			
				mountain big sagebrush	5			
				mountain brome	5			
				mountain snowberry	5			
4:								
Almy----------	Rolling Loam	Favorable	1,000	western wheatgrass	25		---	---
		Normal	800	Wyoming big sagebrush	15			
		Unfavorable	500	other perennial forbs	10			
				prairie Junegrass	10			
				Indian ricegrass	5			
				bluebunch wheatgrass	5			
				needleandthread	5			
				other perennial grasses	5			
				other shrubs	5			
5:								
Apmay----------	River Bottom	Favorable	2,000	basin wildrye	15		---	---
		Normal	1,700	other shrubs	15			
		Unfavorable	1,500	western wheatgrass	15			
				willow	15			
				slender wheatgrass	10			
				Nebraska sedge	5			
6:								
Avalon----------	Semidesert Loam	Favorable	750	Wyoming big sagebrush	15		---	---
		Normal	600	shadscale saltbush	10			
		Unfavorable	500	western wheatgrass	10			
				Indian ricegrass	5			
				bottlebrush squirreltail	5			
				fourwing saltbush	5			
				needleandthread	5			
				saline wildrye	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
Mack----------	Loamy Saltdesert	Favorable	700	galleta	35		---	---
		Normal	575	shadscale saltbush	10			
		Unfavorable	475	Indian ricegrass	5			
				bottlebrush squirreltail	5			
				needleandthread	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				saltbush	5			
7:								
Avalon----------	Semidesert Loam	Favorable	750	Wyoming big sagebrush	15		---	---
		Normal	600	Indian ricegrass	10			
		Unfavorable	500	galleta	10			
				shadscale saltbush	10			
				western wheatgrass	10			
				needleandthread	5			
				winterfat	5			
Persayo---------	Semidesert Loam	Favorable	750	Wyoming big sagebrush	15		---	---
		Normal	600	Indian ricegrass	10			
		Unfavorable	500	galleta	10			
				needleandthread	10			
				western wheatgrass	10			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				shadscale saltbush	5			
				streambank wheatgrass	5			
				winterfat	5			
Degater---------	Clayey Slopes	Favorable	600	western wheatgrass	25		---	---
		Normal	500	other perennial forbs	10			
		Unfavorable	300	saline wildrye	10			
				shadscale saltbush	10			
				Gardner's saltbush	5			
				Wyoming big sagebrush	5			
				bottlebrush squirreltail	5			
				other perennial grasses	5			
8:								
Badland---------	---	Favorable	---				---	---
		Normal	---					
		Unfavorable	---					
9:								
Baroid----------	Cold Desert Overflow	Favorable	3,000	basin wildrye	20		---	---
		Normal	2,000	common reed	10			
		Unfavorable	1,000	other perennial forbs	10			
				other shrubs	10			
				alkali sacaton	5			
				other perennial grasses	5			
				western wheatgrass	5			
Eghelm----------	Cold Desert Overflow	Favorable	3,000	basin wildrye	20		---	---
		Normal	2,000	reed	10			
		Unfavorable	1,000	alkali sacaton	5			
				inland saltgrass	5			
				western wheatgrass	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
10:								
Battlement------	Foothill Swale	Favorable	3,000	basin wildrye	30		---	---
		Normal	2,000	western wheatgrass	20			
		Unfavorable	1,000	other perennial grasses	15			
				basin big sagebrush	10			
				other perennial forbs	10			
				fourwing saltbush	5			
11:								
Battlement------	Salt Meadow	Favorable	2,500	alkali sacaton	15		---	---
		Normal	2,000	inland saltgrass	15			
		Unfavorable	1,500	western wheatgrass	15			
				basin wildrye	5			
				fourwing saltbush	5			
				greasewood	5			
				sedge	5			
				tall rabbitbrush	5			
12:								
Berlake---------	Sandy Foothills	Favorable	1,200	Wyoming big sagebrush	25		---	---
		Normal	1,000	needleandthread	20			
		Unfavorable	600	Indian ricegrass	10			
				antelope bitterbrush	5			
				bluebunch wheatgrass	5			
				prairie Junegrass	5			
				western wheatgrass	5			
13:								
Berlake---------	Deep Loam	Favorable	1,800	Wyoming big sagebrush	15		---	---
		Normal	1,500	needleandthread	15			
		Unfavorable	900	western wheatgrass	15			
				bluebunch wheatgrass	10			
				muttongrass	10			
				Letterman's needlegrass	5			
				Saskatoon serviceberry	5			
				antelope bitterbrush	5			
				prairie Junegrass	5			
14:								
Berlake---------	Sandy Foothills	Favorable	1,200	Wyoming big sagebrush	25		---	---
		Normal	1,000	needleandthread	20			
		Unfavorable	600	Indian ricegrass	10			
				antelope bitterbrush	5			
				bluebunch wheatgrass	5			
				prairie Junegrass	5			
				western wheatgrass	5			
Maysprings------	Rolling Loam	Favorable	1,000	Wyoming big sagebrush	15		---	---
		Normal	800	needleandthread	10			
		Unfavorable	500	other perennial forbs	10			
				bluebunch wheatgrass	5			
				bottlebrush squirreltail	5			
				other perennial grasses	5			
				prairie Junegrass	5			
				western wheatgrass	5			
				yellow rabbitbrush	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
15:								
Berlake---------	Deep Loam	Favorable	1,400	Wyoming big sagebrush	25		---	---
		Normal	1,200	needleandthread	20			
		Unfavorable	900	Indian ricegrass	10			
				Letterman's needlegrass	5			
				antelope bitterbrush	5			
				bluebunch wheatgrass	5			
				other perennial forbs	5			
				other perennial grasses	5			
				prairie Junegrass	5			
				western wheatgrass	5			
Taffom----------	Rolling Loam	Favorable	1,000	Wyoming big sagebrush	15		---	---
		Normal	800	needleandthread	15			
		Unfavorable	500	western wheatgrass	15			
				prairie Junegrass	10			
				Indian ricegrass	5			
				Nevada bluegrass	5			
				bluebunch wheatgrass	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
Gretdivid-------	Sandy Land	Favorable	---				---	---
		Normal	---					
		Unfavorable	---					
16:								
Bilhil----------	Foothill Swale	Favorable	3,000	basin wildrye	30		---	---
		Normal	2,000	basin big sagebrush	10			
		Unfavorable	1,000	slender wheatgrass	10			
				western wheatgrass	10			
				Nevada bluegrass	5			
17:								
Binco-----------	Claypan	Favorable	800	alkali sagebrush	35		---	---
		Normal	500	bluebunch wheatgrass	10			
		Unfavorable	300	prairie Junegrass	10			
				western wheatgrass	10			
				Nevada bluegrass	5			
				bottlebrush squirreltail	5			
18:								
Boltus----------	Alkali Upland	Favorable	600	Indian ricegrass	10		---	---
		Normal	400	streambank wheatgrass	10			
		Unfavorable	350	streambank wheatgrass	10			
				western wheatgrass	10			
				bottlebrush squirreltail	5			
Beamton---------	Alkali Upland	Favorable	600	Gardner's saltbush	30		---	---
		Normal	400	Indian ricegrass	10			
		Unfavorable	350	streambank wheatgrass	10			
				streambank wheatgrass	10			
				western wheatgrass	10			
				bottlebrush squirreltail	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
19:								
Borollic Natrargids-----	---	Favorable	800	wheatgrass	30		---	---
		Normal	650	sagebrush	20			
		Unfavorable	400	black greasewood	10			
				Gardner's saltbush	5			
				Nevada bluegrass	5			
				bottlebrush squirreltail	5			
				prairie Junegrass	5			
Borollic Haplargids-----	---	Favorable	1,000	Wyoming big sagebrush	15		---	---
		Normal	800	western wheatgrass	15			
		Unfavorable	500	Indian ricegrass	5			
				Nevada bluegrass	5			
				needleandthread	5			
				prairie Junegrass	5			
Ustic Torrifluvents--	---	Favorable	3,000	basin wildrye	40		---	---
		Normal	2,000	other perennial grasses	15			
		Unfavorable	1,000	basin big sagebrush	10			
				western wheatgrass	10			
20:								
Brownsto--------	Loamy 10-14" PPT	Favorable	1,200	Wyoming big sagebrush	15		---	---
		Normal	1,000	bluebunch wheatgrass	15			
		Unfavorable	700	shadscale saltbush	10			
				Indian ricegrass	5			
				Nevada bluegrass	5			
				bottlebrush squirreltail	5			
				needleandthread	5			
				prairie Junegrass	5			
				streambank wheatgrass	5			
Castee----------	Loamy	Favorable	1,200	Wyoming big sagebrush	15		---	---
		Normal	1,000	bluebunch wheatgrass	15			
		Unfavorable	700	shadscale saltbush	10			
				Indian ricegrass	5			
				Nevada bluegrass	5			
				bottlebrush squirreltail	5			
				needleandthread	5			
				prairie Junegrass	5			
				streambank wheatgrass	5			
21:								
Bulkley---------	Clayey Footslopes	Favorable	1,200	western wheatgrass	35		---	---
		Normal	900	Wyoming big sagebrush	15			
		Unfavorable	600	Nevada bluegrass	5			
				Utah serviceberry	5			
				bluebunch wheatgrass	5			
				mountain snowberry	5			
				muttongrass	5			
				prairie Junegrass	5			
22:								
Bulkley---------	Clayey Foothills	Favorable	1,200	western wheatgrass	40		---	---
		Normal	900	Wyoming big sagebrush	15			
		Unfavorable	600	bottlebrush squirreltail	5			
				other perennial forbs	5			
				other perennial grasses	5			
				prairie Junegrass	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
23:								
Bulkley---------	Clayey Foothills	Favorable	1,200	western wheatgrass	40		---	---
		Normal	900	Wyoming big sagebrush	15			
		Unfavorable	600	bottlebrush squirreltail	5			
				other perennial forbs	5			
				other perennial grasses	5			
				prairie Junegrass	5			
24:								
Bulkley---------	Deep Clay Loam	Favorable	2,500	western wheatgrass	15		---	---
		Normal	2,000	Letterman's needlegrass	10			
		Unfavorable	1,500	Wyoming big sagebrush	10			
				muttongrass	10			
				slender wheatgrass	10			
				mountain snowberry	5			
				other perennial forbs	5			
				other perennial grasses	5			
				prairie Junegrass	5			
Quilt-----------	Mountain Loam	Favorable	1,500	Letterman's needlegrass	15		---	---
		Normal	1,200	mountain big sagebrush	15			
		Unfavorable	1,000	elk sedge	5			
				mountain brome	5			
				mountain snowberry	5			
				nodding brome	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				prairie Junegrass	5			
25:								
Campspass-------	Clayey Foothills	Favorable	1,200	western wheatgrass	30		---	---
		Normal	900	mountain big sagebrush	15			
		Unfavorable	600	streambank wheatgrass	10			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				prairie Junegrass	5			
				streambank wheatgrass	5			
26:								
Campspass-------	Clayey Foothills	Favorable	1,200	western wheatgrass	30		---	---
		Normal	900	mountain big sagebrush	15			
		Unfavorable	600	streambank wheatgrass	10			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				prairie Junegrass	5			
				streambank wheatgrass	5			
27:								
Canlodore-------	Lodgepole Pine	Favorable	---	elk sedge		15	lodgepole pine	38
		Normal	---	Colorado wildrye		5		
		Unfavorable	---	common juniper		5		
				grouse whortleberry		5		
				heartleaf arnica		5		
				spike trisetum		5		

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Rangeland	Forest		
			Lb/acre		Pct.	Pct.		
28:								
Carbol----------	Dry Exposure	Favorable	500	black sagebrush	15		---	---
		Normal	400	bluebunch wheatgrass	15			
		Unfavorable	200	prairie Junegrass	10			
				streambank wheatgrass	10			
				western wheatgrass	10			
				Indian ricegrass	5			
				needleandthread	5			
				other perennial forbs	5			
				other perennial grasses	5			
Irigul----------	Dry Exposure	Favorable	500	black sagebrush	15		---	---
		Normal	400	bluebunch wheatgrass	15			
		Unfavorable	200	needleandthread	15			
				Indian ricegrass	10			
				prairie Junegrass	10			
				western wheatgrass	5			
Rock outcrop----	---	Favorable	---				---	---
		Normal	---					
		Unfavorable	---					
29:								
Carbol----------	Dry Exposure	Favorable	500	black sagebrush	15		---	---
		Normal	400	bluebunch wheatgrass	15			
		Unfavorable	200	prairie Junegrass	10			
				streambank wheatgrass	10			
				western wheatgrass	10			
				Indian ricegrass	5			
				needleandthread	5			
				other perennial forbs	5			
				other perennial grasses	5			
Miracle----------	Mountain Loam	Favorable	1,800	Letterman's needlegrass	15		---	---
		Normal	1,500	slender wheatgrass	15			
		Unfavorable	1,200	mountain big sagebrush	10			
				elk sedge	5			
				mountain brome	5			
				mountain snowberry	5			
				nodding brome	5			
30:								
Carmody----------	Rolling Loam	Favorable	1,000	Wyoming big sagebrush	15		---	---
		Normal	800	needleandthread	10			
		Unfavorable	500	western wheatgrass	10			
				Indian ricegrass	5			
				Nevada bluegrass	5			
				bluebunch wheatgrass	5			
				bottlebrush squirreltail	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				prairie Junegrass	5			
Rock River------	Rolling Loam	Favorable	1,000	Wyoming big sagebrush	15		---	---
		Normal	800	needleandthread	15			
		Unfavorable	500	Indian ricegrass	10			
				western wheatgrass	10			
				Nevada bluegrass	5			
				bottlebrush squirreltail	5			
				prairie Junegrass	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
30:								
Crestman--------	Rolling Loam	Favorable	1,000	Wyoming big sagebrush	15		---	---
		Normal	800	needleandthread	15			
		Unfavorable	500	Sandberg bluegrass	10			
				western wheatgrass	10			
				Indian ricegrass	5			
				bluebunch wheatgrass	5			
				bottlebrush squirreltail	5			
				prairie Junegrass	5			
31:								
Castee----------	Loamy 10-14" PPT	Favorable	1,200	Wyoming big sagebrush	15		---	---
		Normal	1,000	bluebunch wheatgrass	15			
		Unfavorable	700	shadscale saltbush	10			
				Indian ricegrass	5			
				Nevada bluegrass	5			
				bottlebrush squirreltail	5			
				needleandthread	5			
				prairie Junegrass	5			
				streambank wheatgrass	5			
32:								
Chroder---------	Loamy Cold Desert	Favorable	600	Wyoming big sagebrush	20		---	---
		Normal	425	needleandthread	20			
		Unfavorable	250	Indian ricegrass	10			
				bottlebrush squirreltail	10			
				streambank wheatgrass	10			
				western wheatgrass	10			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				shadscale saltbush	5			
33:								
Clayburn--------	Mountain Loam	Favorable	1,800	Letterman's needlegrass	15		---	---
		Normal	1,500	slender wheatgrass	15			
		Unfavorable	1,200	mountain big sagebrush	10			
				Saskatoon serviceberry	5			
				elk sedge	5			
				mountain brome	5			
				mountain snowberry	5			
				nodding brome	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
34:								
Clayburn--------	Brushy Loam	Favorable	3,000	Gambel's oak	15		---	---
		Normal	2,000	Letterman's needlegrass	10			
		Unfavorable	1,500	elk sedge	10			
				mountain brome	10			
				Saskatoon serviceberry	5			
				mountain snowberry	5			
				slender wheatgrass	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
34:								
Foidel----------	Aspen	Favorable	---	Porter's licoriceroot		10	quaking aspen	50
		Normal	---	blue wildrye		10		
		Unfavorable	---	mountain brome		10		
				mountain snowberry		10		
				American vetch		5		
				Fendler's meadowrue		5		
				Saskatoon serviceberry		5		
				silvery lupine		5		
35:								
Clayburn--------	Brushy Loam	Favorable	3,000	Gambel's oak	15		---	---
		Normal	2,000	Saskatoon serviceberry	10			
		Unfavorable	1,500	mountain brome	10			
				other shrubs	10			
				Letterman's needlegrass	5			
				elk sedge	5			
				mountain snowberry	5			
				nodding brome	5			
				other perennial forbs	5			
				other perennial grasses	5			
				slender wheatgrass	5			
Youga-----------	Brushy Loam	Favorable	3,000	Gambel's oak	10		---	---
		Normal	2,000	Saskatoon serviceberry	10			
		Unfavorable	1,500	elk sedge	10			
				mountain brome	10			
				Letterman's needlegrass	5			
				common chokecherry	5			
				mountain snowberry	5			
				nodding brome	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				slender wheatgrass	5			
36:								
Clifsand--------	Loamy Cold Desert	Favorable	600	Wyoming big sagebrush	20		---	---
		Normal	425	needleandthread	20			
		Unfavorable	250	Indian ricegrass	10			
				bottlebrush squirreltail	10			
				streambank wheatgrass	10			
				shadscale saltbush	5			
				western wheatgrass	5			
Chroder---------	Loamy Cold Desert	Favorable	600	Wyoming big sagebrush	20		---	---
		Normal	425	needleandthread	20			
		Unfavorable	250	Indian ricegrass	10			
				bottlebrush squirreltail	10			
				streambank wheatgrass	10			
				western wheatgrass	10			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				shadscale saltbush	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
37:								
Cochetopa-------	Mountain Loam	Favorable	1,800	slender wheatgrass	15		---	---
		Normal	1,500	Letterman's needlegrass	10			
		Unfavorable	1,200	mountain big sagebrush	10			
				elk sedge	5			
				mountain brome	5			
				mountain snowberry	5			
				nodding brome	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
38:								
Cochetopa-------	Brushy Loam	Favorable	3,000	Gambel's oak	10		---	---
		Normal	2,000	Letterman's needlegrass	10			
		Unfavorable	1,500	Saskatoon serviceberry	10			
				Woods' rose	5			
				elk sedge	5			
				mountain brome	5			
				mountain snowberry	5			
				nodding brome	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				slender wheatgrass	5			
39:								
Cochetopa-------	Mountain Loam	Favorable	1,800	slender wheatgrass	15		---	---
		Normal	1,500	Letterman's needlegrass	10			
		Unfavorable	1,200	mountain big sagebrush	10			
				elk sedge	5			
				mountain brome	5			
				mountain snowberry	5			
				nodding brome	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
40:								
Cochetopa-------	Mountain Loam	Favorable	1,800	slender wheatgrass	15		---	---
		Normal	1,500	Letterman's needlegrass	10			
		Unfavorable	1,200	mountain big sagebrush	10			
				elk sedge	5			
				mountain brome	5			
				mountain snowberry	5			
				nodding brome	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
Gothic----------	Brushy Loam	Favorable	3,000	Gambel's oak	20		---	---
		Normal	2,000	Saskatoon serviceberry	10			
		Unfavorable	1,500	Letterman's needlegrass	5			
				Woods' rose	5			
				elk sedge	5			
				mountain brome	5			
				mountain snowberry	5			
				nodding brome	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
41:								
Cochetopa-------	Brushy Loam	Favorable	3,000	Gambel's oak	10		---	---
		Normal	2,000	Letterman's needlegrass	10			
		Unfavorable	1,500	Saskatoon serviceberry	10			
				Woods' rose	5			
				elk sedge	5			
				mountain brome	5			
				mountain snowberry	5			
				nodding brome	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				slender wheatgrass	5			
Gothic----------	Brushy Loam	Favorable	3,000	Gambel's oak	20		---	---
		Normal	2,000	Saskatoon serviceberry	10			
		Unfavorable	1,500	Letterman's needlegrass	5			
				Woods' rose	5			
				elk sedge	5			
				mountain brome	5			
				mountain snowberry	5			
				nodding brome	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
42:								
Cochetopa-------	Mountain Loam	Favorable	1,800	slender wheatgrass	15		---	---
		Normal	1,500	Letterman's needlegrass	10			
		Unfavorable	1,200	mountain big sagebrush	10			
				elk sedge	5			
				mountain brome	5			
				mountain snowberry	5			
				nodding brome	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
Jerry-----------	Stony Loam	Favorable	2,000	bluebunch wheatgrass	20		---	---
		Normal	1,200	Utah serviceberry	15			
		Unfavorable	1,000	mountain big sagebrush	10			
				Letterman's needlegrass	5			
				bottlebrush squirreltail	5			
				mountain snowberry	5			
				muttongrass	5			
				western wheatgrass	5			
43:								
Coldspring------	Aspen	Favorable	---	other perennial forbs		15	quaking aspen	50
		Normal	---	quaking aspen		15		
		Unfavorable	---	mountain brome		10		
				nodding brome		10		
				common juniper		5		
				elk sedge		5		
				mountain snowberry		5		
				other perennial grasses		5		
				other shrubs		5		
				slender wheatgrass		5		

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
44:								
Cowestglen------	Foothill Swale	Favorable	3,000	basin wildrye	40		---	---
		Normal	2,000	basin big sagebrush	10			
		Unfavorable	1,000	other perennial forbs	10			
				other perennial grasses	10			
				western wheatgrass	10			
				other shrubs	5			
45:								
Coyet-----------	Sandhills	Favorable	1,200	antelope bitterbrush	20		---	---
		Normal	1,000	needleandthread	15			
		Unfavorable	600	silver sagebrush	15			
				Indian ricegrass	10			
				Wyoming big sagebrush	5			
				galleta	5			
				other perennial forbs	5			
				other perennial grasses	5			
				prairie Junegrass	5			
				sand dropseed	5			
				prairie sagewort	3			
46:								
Coyet-----------	Sandhills	Favorable	1,200	antelope bitterbrush	20		---	---
		Normal	1,000	needleandthread	15			
		Unfavorable	600	silver sagebrush	15			
				Indian ricegrass	10			
				Wyoming big sagebrush	5			
				galleta	5			
				other perennial forbs	5			
				other perennial grasses	5			
				prairie Junegrass	5			
				sand dropseed	5			
				prairie sagewort	3			
47:								
Coyet-----------	Sandy Foothills	Favorable	1,200	needleandthread	25		---	---
		Normal	900	Wyoming big sagebrush	15			
		Unfavorable	600	Indian ricegrass	10			
				antelope bitterbrush	10			
				other perennial forbs	10			
				western wheatgrass	10			
				prairie Junegrass	5			
				sand dropseed	5			
				silver sagebrush	5			
Crestman--------	Loamy Breaks	Favorable	800	Wyoming big sagebrush	15		---	---
		Normal	500	western wheatgrass	15			
		Unfavorable	400	antelope bitterbrush	10			
				Indian ricegrass	5			
				Sandberg bluegrass	5			
				Truckee rabbitbrush	5			
				bluebunch wheatgrass	5			
				bottlebrush squirreltail	5			
				needleandthread	5			
				prairie Junegrass	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
48:								
Crago----------	Foothill Juniper	Favorable	---	Wyoming big sagebrush		15	Utah juniper	90
		Normal	---	bluebunch wheatgrass		15	twoneedle pinyon	90
		Unfavorable	---	prairie Junegrass		10		
				true mountain mahogany		10		
				other perennial forbs		5		
				other perennial grasses		5		
				other shrubs		5		
				western wheatgrass		5		
Pensore---------	Foothill Juniper	Favorable	---	bluebunch wheatgrass		20	Utah juniper	70
		Normal	---	black sagebrush		15	twoneedle pinyon	70
		Unfavorable	---	Indian ricegrass		10		
				prairie Junegrass		10		
				western wheatgrass		10		
				needleandthread		5		
Grapit----------	Foothill Juniper	Favorable	---	bluebunch wheatgrass		15	Utah juniper	90
		Normal	---	mountain big sagebrush		15	twoneedle pinyon	90
		Unfavorable	---	stemless goldenweed		10		
				Saskatoon serviceberry		5		
				prairie Junegrass		5		
				true mountain mahogany		5		
				western wheatgrass		5		
49:								
Cryoborolls-----	---	Favorable	3,000	Columbia needlegrass	10		---	---
		Normal	2,500	Gambel's oak	10			
		Unfavorable	1,800	elk sedge	10			
				slender wheatgrass	10			
				Saskatoon serviceberry	5			
				letterman needlegrass	5			
				mountain brome	5			
				mountain snowberry	5			
				nodding bromegrass	5			
				quaking aspen	5			
50:								
Cushool---------	Rolling Loam	Favorable	1,000	big sagebrush	15		---	---
		Normal	800	needleandthread	15			
		Unfavorable	500	western wheatgrass	15			
				prairie Junegrass	10			
				Indian ricegrass	5			
				Sandberg bluegrass	5			
				bluebunch wheatgrass	5			
				other perennial forbs	5			
				other perennial grasses	5			
51:								
Cushool---------	Rolling Loam	Favorable	1,000	big sagebrush	15		---	---
		Normal	800	needleandthread	15			
		Unfavorable	500	western wheatgrass	15			
				prairie Junegrass	10			
				Indian ricegrass	5			
				Sandberg bluegrass	5			
				bluebunch wheatgrass	5			
				other perennial forbs	5			
				other perennial grasses	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
52:								
Danavore--------	Dry Exposure	Favorable	500	black sagebrush	15		---	---
		Normal	400	bluebunch wheatgrass	15			
		Unfavorable	200	western wheatgrass	15			
				bottlebrush squirreltail	10			
				needleandthread	10			
				other perennial grasses	10			
				other shrubs	10			
				prairie Junegrass	10			
				other perennial forbs	5			
Waybe-----------	Dry Exposure	Favorable	500	bluebunch wheatgrass	20		---	---
		Normal	400	black sagebrush	15			
		Unfavorable	200	bottlebrush squirreltail	10			
				western wheatgrass	10			
				needleandthread	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				prairie Junegrass	5			
53:								
Davtone---------	Mountain Loam	Favorable	1,800	Letterman's needlegrass	15		---	---
		Normal	1,500	slender wheatgrass	15			
		Unfavorable	1,200	mountain big sagebrush	10			
				Utah serviceberry	5			
				mountain brome	5			
				mountain snowberry	5			
Forsey----------	Dry Exposure	Favorable	500	black sagebrush	15		---	---
		Normal	400	bluebunch wheatgrass	15			
		Unfavorable	200	needleandthread	15			
				Indian ricegrass	10			
				prairie Junegrass	10			
				bottlebrush squirreltail	5			
				western wheatgrass	5			
54:								
Deaver----------	Clayey Slopes	Favorable	600	western wheatgrass	25		---	---
		Normal	500	saline wildrye	10			
		Unfavorable	300	shadscale saltbush	10			
				Indian ricegrass	5			
				Sandberg bluegrass	5			
				bottlebrush squirreltail	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				prairie Junegrass	5			
Avalon----------	Semidesert Loam	Favorable	750	Wyoming big sagebrush	15		---	---
		Normal	600	shadscale saltbush	10			
		Unfavorable	500	western wheatgrass	10			
				Indian ricegrass	5			
				bottlebrush squirreltail	5			
				fourwing saltbush	5			
				needleandthread	5			
				saline wildrye	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Rangeland	Forest		
			Lb/acre		Pct.	Pct.		
55:								
Deaver----------	Clayey Saltdesert	Favorable	500	saltbush	20		---	---
		Normal	350	shadscale saltbush	20			
		Unfavorable	200	galleta	15			
				mat saltbush	10			
				Indian ricegrass	5			
				bottlebrush squirreltail	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				saline wildrye	5			
Chipeta---------	Clayey Saltdesert	Favorable	500	saltbush	20		---	---
		Normal	350	saline wildrye	15			
		Unfavorable	200	mat saltbush	10			
				Indian ricegrass	5			
				bottlebrush squirreltail	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				shadscale saltbush	5			
				western wheatgrass	5			
56:								
Debone----------	Alkaline Slopes	Favorable	700	greasewood	20		---	---
		Normal	550	shadscale saltbush	15			
		Unfavorable	400	Wyoming big sagebrush	10			
				bottlebrush squirreltail	10			
				western wheatgrass	10			
				Indian ricegrass	5			
				bud sagebrush	5			
				galleta	5			
57:								
Detra-----------	Mountain Loam	Favorable	1,800	Letterman's needlegrass	15		---	---
		Normal	1,500	slender wheatgrass	15			
		Unfavorable	1,200	mountain big sagebrush	10			
				elk sedge	5			
				mountain brome	5			
				mountain snowberry	5			
				nodding brome	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
Cortyzack-------	Deep Loam	Favorable	1,800	mountain big sagebrush	15		---	---
		Normal	1,500	needleandthread	15			
		Unfavorable	900	western wheatgrass	15			
				Indian ricegrass	10			
				other perennial forbs	10			
				Saskatoon serviceberry	5			
				basin wildrye	5			
				mountain snowberry	5			
				muttongrass	5			
				prairie Junegrass	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
58:								
Diaflats--------	Loamy 7-10" PPT	Favorable	625	Wyoming big sagebrush	15		---	---
		Normal	575	Indian ricegrass	10			
		Unfavorable	350	needleandthread	10			
				shadscale saltbush	10			
				streambank wheatgrass	10			
				bottlebrush squirreltail	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				streambank wheatgrass	5			
				western wheatgrass	5			
Fondillas-------	Loamy 7-10" PPT	Favorable	625	Wyoming big sagebrush	15		---	---
		Normal	525	Indian ricegrass	10			
		Unfavorable	350	needleandthread	10			
				shadscale saltbush	10			
				streambank wheatgrass	10			
				bluebunch wheatgrass	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				streambank wheatgrass	5			
				western wheatgrass	5			
59:								
Dranyon---------	---	Favorable	3,000	elk sedge		20	quaking aspen	65
		Normal	---	Letterman's needlegrass		5		
		Unfavorable	2,000	blue wildrye		5		
				heartleaf arnica		5		
				slender wheatgrass		5		
60:								
Dumps, mine-----		Favorable	---				---	---
		Normal	---					
		Unfavorable	---					
61:								
Ecklund---------	Sandy Cold Desert	Favorable	725	needleandthread	20		---	---
		Normal	650	Indian ricegrass	10			
		Unfavorable	525	bottlebrush squirreltail	10			
				shadscale saltbush	10			
				Nevada bluegrass	5			
				Wyoming big sagebrush	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				plains pricklypear	5			
				spiny hopsage	5			
				streambank wheatgrass	5			
Tipperary-------	Sandy Cold Desert	Favorable	725	needleandthread	20		---	---
		Normal	650	spiny hopsage	15			
		Unfavorable	525	Indian ricegrass	10			
				shadscale saltbush	10			
				Nevada bluegrass	5			
				Wyoming big sagebrush	5			
				bottlebrush squirreltail	5			
				plains pricklypear	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Rangeland	Forest		
			Lb/acre		Pct.	Pct.		
62:								
Eghelm----------	Saltdesert Overflow	Favorable	2,000	alkali sacaton	20		---	---
		Normal	1,500	basin wildrye	10			
		Unfavorable	1,000	big sagebrush	10			
				fourwing saltbush	10			
				other perennial grasses	10			
				Indian ricegrass	5			
				galleta	5			
				greasewood	5			
				other shrubs	5			
63:								
Eghelm----------	Foothill Swale	Favorable	2,500	basin wildrye	30		---	---
		Normal	2,000	big sagebrush	10			
		Unfavorable	1,000	other perennial grasses	10			
				other shrubs	10			
				streambank wheatgrass	10			
				Indian ricegrass	5			
				fourwing saltbush	5			
				western wheatgrass	5			
64:								
Emlin-----------	Deep Loam	Favorable	1,800	needleandthread	15		---	---
		Normal	1,500	western wheatgrass	15			
		Unfavorable	900	mountain big sagebrush	10			
				muttongrass	10			
				other perennial forbs	10			
				prairie Junegrass	10			
				Nevada bluegrass	5			
				mountain snowberry	5			
				yellow rabbitbrush	5			
				basin wildrye	3			
65:								
Emlin-----------	Deep Loam	Favorable	1,800	needleandthread	15		---	---
		Normal	1,500	western wheatgrass	15			
		Unfavorable	900	mountain big sagebrush	10			
				muttongrass	10			
				other perennial forbs	10			
				prairie Junegrass	10			
				Nevada bluegrass	5			
				mountain snowberry	5			
				yellow rabbitbrush	5			
				basin wildrye	3			
Tymosling-------	Dry Exposure	Favorable	500	bluebunch wheatgrass	20		---	---
		Normal	400	Indian ricegrass	15			
		Unfavorable	200	needleandthread	15			
				prairie Junegrass	10			
				winterfat	5			
66:								
Evanot----------	Deep Loam	Favorable	1,800	Wyoming big sagebrush	15		---	---
		Normal	1,500	needleandthread	15			
		Unfavorable	900	western wheatgrass	15			
				other perennial forbs	10			
				mountain snowberry	5			
				muttongrass	5			
				other perennial grasses	5			
				other shrubs	5			
				prairie Junegrass	5			
				basin wildrye	3			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
67:								
Evanot----------	Deep Loam	Favorable	1,800	Wyoming big sagebrush	15		---	---
		Normal	1,500	needleandthread	15			
		Unfavorable	900	western wheatgrass	15			
				other perennial forbs	10			
				mountain snowberry	5			
				muttongrass	5			
				other perennial grasses	5			
				other shrubs	5			
				prairie Junegrass	5			
				basin wildrye	3			
68:								
Evanot----------	Deep Loam	Favorable	1,800	Wyoming big sagebrush	15		---	---
		Normal	1,500	needleandthread	15			
		Unfavorable	900	western wheatgrass	15			
				other perennial forbs	10			
				mountain snowberry	5			
				muttongrass	5			
				other perennial grasses	5			
				other shrubs	5			
				prairie Junegrass	5			
				basin wildrye	3			
Yamo------------	Clayey Foothills	Favorable	1,200	western wheatgrass	30		---	---
		Normal	900	Wyoming big sagebrush	15			
		Unfavorable	600	bluebunch wheatgrass	10			
				yellow rabbitbrush	5			
69:								
Fenster---------	Alkali Upland	Favorable	650	Gardner's saltbush	45		---	---
		Normal	400	Indian ricegrass	10			
		Unfavorable	350	streambank wheatgrass	10			
				western wheatgrass	10			
Thenipel--------	Rolling Loam	Favorable	1,000	western wheatgrass	20		---	---
		Normal	700	Wyoming big sagebrush	15			
		Unfavorable	500	needleandthread	10			
				Indian ricegrass	5			
				Nevada bluegrass	5			
				bottlebrush squirreltail	5			
				prairie Junegrass	5			
70:								
Fluvaquents-----	---	Favorable	3,000	cattail	15		---	---
		Normal	2,000	rush	15			
		Unfavorable	1,000	sedge	15			
				willow	15			
				common reed	10			
				reed canarygrass	10			
Haplaquolls-----	---	Favorable	3,000	cattail	15		---	---
		Normal	2,000	rush	15			
		Unfavorable	1,000	sedge	15			
				willow	15			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
71:								
Flygare----------	Brushy Loam	Favorable	3,000	Gambel's oak	10		---	---
		Normal	2,000	Saskatoon serviceberry	10			
		Unfavorable	1,500	elk sedge	10			
				mountain brome	10			
				Letterman's needlegrass	5			
				common chokecherry	5			
				mountain snowberry	5			
				nodding brome	5			
				slender wheatgrass	5			
72:								
Foidel----------	Brushy Loam	Favorable	3,000	Gambel's oak	20		---	---
		Normal	2,000	Saskatoon serviceberry	10			
		Unfavorable	1,500	mountain brome	10			
				Letterman's needlegrass	5			
				common chokecherry	5			
				elk sedge	5			
				mountain snowberry	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				slender wheatgrass	5			
73:								
Foidel----------	Brushy Loam	Favorable	3,000	Gambel's oak	20		---	---
		Normal	2,000	Saskatoon serviceberry	10			
		Unfavorable	1,500	mountain brome	10			
				Letterman's needlegrass	5			
				common chokecherry	5			
				elk sedge	5			
				mountain snowberry	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				slender wheatgrass	5			
74:								
Foidel----------	Aspen	Favorable	---	common chokecherry		10	quaking aspen	70
		Normal	---	elk sedge		10		
		Unfavorable	---	mountain brome		10		
				other perennial forbs		10		
				Letterman's needlegrass		5		
				Saskatoon serviceberry		5		
				mountain snowberry		5		
				other perennial grasses		5		
				other shrubs		5		
				slender wheatgrass		5		
Flygare----------	Aspen	Favorable	---	Colorado wildrye		10	quaking aspen	70
		Normal	---	mountain brome		10		
		Unfavorable	---	Letterman's needlegrass		5		
				Saskatoon serviceberry		5		
				common chokecherry		5		
				elk sedge		5		
				mountain snowberry		5		
				nodding brome		5		
				quaking aspen		5		

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
74:								
Skyway----------	Aspen	Favorable	---	elk sedge		10	quaking aspen	60
		Normal	---	mountain brome		10		
		Unfavorable	---	nodding brome		10		
				Gambel's oak		5		
				Saskatoon serviceberry		5		
				mountain snowberry		5		
75:								
Fonce----------	Loamy 7-10" PPT	Favorable	625	Wyoming big sagebrush	15		---	---
		Normal	500	Indian ricegrass	10			
		Unfavorable	375	needleandthread	10			
				streambank wheatgrass	10			
				streambank wheatgrass	10			
				Sandberg bluegrass	5			
				bluebunch wheatgrass	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				prairie Junegrass	5			
				western wheatgrass	5			
76:								
Fonce----------	Shallow Slopes	Favorable	800	streambank wheatgrass	15		---	---
		Normal	650	streambank wheatgrass	15			
		Unfavorable	500	black sagebrush	10			
				bluebunch wheatgrass	10			
				bottlebrush squirreltail	10			
				needleandthread	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
77:								
Forelle----------	Rolling Loam	Favorable	1,000	Wyoming big sagebrush	15		---	---
		Normal	800	western wheatgrass	15			
		Unfavorable	500	Sandberg bluegrass	10			
				needleandthread	10			
				prairie Junegrass	10			
				Indian ricegrass	5			
				bluebunch wheatgrass	5			
78:								
Forelle----------	Rolling Loam	Favorable	1,000	Wyoming big sagebrush	15		---	---
		Normal	800	western wheatgrass	15			
		Unfavorable	500	Sandberg bluegrass	10			
				needleandthread	10			
				prairie Junegrass	10			
				Indian ricegrass	5			
				bluebunch wheatgrass	5			
79:								
Forelle----------	Rolling Loam	Favorable	1,000	Wyoming big sagebrush	15		---	---
		Normal	800	western wheatgrass	15			
		Unfavorable	500	Sandberg bluegrass	10			
				needleandthread	10			
				prairie Junegrass	10			
				Indian ricegrass	5			
				bluebunch wheatgrass	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
79:								
Evanot----------	Deep Loam	Favorable	1,800	Wyoming big sagebrush	15		---	---
		Normal	1,500	needleandthread	15			
		Unfavorable	900	western wheatgrass	15			
				other perennial forbs	10			
				mountain snowberry	5			
				muttongrass	5			
				other perennial grasses	5			
				other shrubs	5			
				prairie Junegrass	5			
				basin wildrye	3			
80:								
Forelle----------	Rolling Loam	Favorable	1,000	Wyoming big sagebrush	15		---	---
		Normal	800	western wheatgrass	15			
		Unfavorable	500	Sandberg bluegrass	10			
				needleandthread	10			
				prairie Junegrass	10			
				Indian ricegrass	5			
				bluebunch wheatgrass	5			
Evanot----------	Deep Loam	Favorable	1,800	Wyoming big sagebrush	15		---	---
		Normal	1,500	needleandthread	15			
		Unfavorable	900	western wheatgrass	15			
				other perennial forbs	10			
				mountain snowberry	5			
				muttongrass	5			
				other perennial grasses	5			
				other shrubs	5			
				prairie Junegrass	5			
				basin wildrye	3			
81:								
Forelle----------	Rolling Loam	Favorable	1,000	Wyoming big sagebrush	15		---	---
		Normal	800	western wheatgrass	15			
		Unfavorable	500	Sandberg bluegrass	10			
				needleandthread	10			
				prairie Junegrass	10			
				Indian ricegrass	5			
				bluebunch wheatgrass	5			
Obadia----------	Claypan	Favorable	800	alkali sagebrush	40		---	---
		Normal	500	western wheatgrass	15			
		Unfavorable	300	bluebunch wheatgrass	5			
				prairie Junegrass	5			
82:								
Forelle----------	Rolling Loam	Favorable	1,000	Wyoming big sagebrush	15		---	---
		Normal	800	western wheatgrass	15			
		Unfavorable	500	Sandberg bluegrass	10			
				needleandthread	10			
				prairie Junegrass	10			
				Indian ricegrass	5			
				bluebunch wheatgrass	5			
Pinelli----------	Clayey Foothills	Favorable	1,200	western wheatgrass	40		---	---
		Normal	900	Wyoming big sagebrush	5			
		Unfavorable	600	bottlebrush squirreltail	5			
				prairie Junegrass	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
82:								
Maysprings------	Sandyland	Favorable	1,200	antelope bitterbrush	20		---	---
		Normal	1,000	Wyoming big sagebrush	15			
		Unfavorable	600	needleandthread	15			
				Indian ricegrass	10			
				bluebunch wheatgrass	5			
				other perennial forbs	5			
				other perennial grasses	5			
				prairie Junegrass	5			
				western wheatgrass	5			
83:								
Forsey----------	Dry Exposure	Favorable	500	black sagebrush	15		---	---
		Normal	400	bluebunch wheatgrass	15			
		Unfavorable	200	needleandthread	15			
				Indian ricegrass	10			
				prairie Junegrass	10			
				bottlebrush squirreltail	5			
				western wheatgrass	5			
Libeg-----------	Dry Mountain Loam	Favorable	1,000	bluebunch wheatgrass	15		---	---
		Normal	750	other perennial grasses	15			
		Unfavorable	500	streambank wheatgrass	15			
				Letterman's needlegrass	10			
				Wyoming big sagebrush	10			
				needleandthread	10			
				other perennial forbs	10			
				other shrubs	5			
84:								
Gebson----------	Stony Loam	Favorable	2,000	bluebunch wheatgrass	20		---	---
		Normal	1,200	Saskatoon serviceberry	15			
		Unfavorable	1,000	mountain big sagebrush	15			
				Letterman's needlegrass	5			
				antelope bitterbrush	5			
				mountain snowberry	5			
				muttongrass	5			
				needleandthread	5			
Youga-----------	Mountain Loam	Favorable	1,800	mountain big sagebrush	15		---	---
		Normal	1,500	western wheatgrass	15			
		Unfavorable	1,200	needleandthread	10			
				Letterman's needlegrass	5			
				mountain brome	5			
				mountain snowberry	5			
				slender wheatgrass	5			
85:								
Giarch----------	Alkaline Slopes	Favorable	800	Wyoming big sagebrush	15		---	---
		Normal	650	greasewood	10			
		Unfavorable	400	inland saltgrass	10			
				streambank wheatgrass	10			
				streambank wheatgrass	10			
				western wheatgrass	10			
				alkali bluegrass	5			
				bottlebrush squirreltail	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
86:								
Gracot----------	Loamy Breaks	Favorable	800	western wheatgrass	15		---	---
		Normal	500	black sagebrush	10			
		Unfavorable	400	bluebunch wheatgrass	10			
				Indian ricegrass	5			
				antelope bitterbrush	5			
				needleandthread	5			
				other shrubs	5			
				prairie Junegrass	5			
Maybell---------	Sandhills	Favorable	1,200	antelope bitterbrush	25		---	---
		Normal	850	silver sagebrush	15			
		Unfavorable	600	Indian ricegrass	10			
				needleandthread	10			
				Wyoming big sagebrush	5			
				other perennial forbs	5			
				other perennial grasses	5			
				rabbitbrush	5			
				sand dropseed	5			
				western wheatgrass	5			
87:								
Gretdivid-------	Sandyland	Favorable	1,000	Wyoming big sagebrush	15		---	---
		Normal	850	antelope bitterbrush	15			
		Unfavorable	700	needleandthread	15			
				Indian ricegrass	10			
				western wheatgrass	10			
				bottlebrush squirreltail	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				prairie Junegrass	5			
				streambank wheatgrass	5			
				streambank wheatgrass	5			
Taffom----------	Rolling Loam	Favorable	1,000	Wyoming big sagebrush	15		---	---
		Normal	800	needleandthread	15			
		Unfavorable	500	western wheatgrass	15			
				prairie Junegrass	10			
				Indian ricegrass	5			
				Nevada bluegrass	5			
				bluebunch wheatgrass	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
Abor----------	Claypan	Favorable	800	alkali sagebrush	30		---	---
		Normal	500	western wheatgrass	20			
		Unfavorable	300	bluebunch wheatgrass	10			
				Sandberg bluegrass	5			
				bottlebrush squirreltail	5			
				other perennial forbs	5			
				other perennial grasses	5			
88:								
Grieves---------	Sandy Foothills	Favorable	1,200	Wyoming big sagebrush	20		---	---
		Normal	900	needleandthread	20			
		Unfavorable	600	Indian ricegrass	10			
				other perennial grasses	10			
				antelope bitterbrush	5			
				other perennial forbs	5			
				other shrubs	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
89:								
Grieves---------	Sandy Foothills	Favorable	1,200	Wyoming big sagebrush	20		---	---
		Normal	900	needleandthread	20			
		Unfavorable	600	Indian ricegrass	10			
				other perennial grasses	10			
				antelope bitterbrush	5			
				other perennial forbs	5			
				other shrubs	5			
90:								
Grieves---------	Sandy Foothills	Favorable	500	antelope bitterbrush	15		---	---
		Normal	250	bluebunch wheatgrass	15			
		Unfavorable	150	Indian ricegrass	10			
				Wyoming big sagebrush	10			
				bottlebrush squirreltail	10			
				needleandthread	10			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
Crestman--------	Sandy Juniper	Favorable	---	Wyoming big sagebrush		15	Utah juniper	65
		Normal	---	streambank wheatgrass		15	twoneedle pinyon	65
		Unfavorable	---	antelope bitterbrush		10		
				needleleaf sedge		10		
				Indian ricegrass		5		
				Truckee rabbitbrush		5		
				bluebunch wheatgrass		5		
				bottlebrush squirreltail		5		
				needleandthread		5		
				prairie Junegrass		5		
				western wheatgrass		5		
91:								
Grieves---------	Sandy Foothills	Favorable	1,200	Wyoming big sagebrush	20		---	---
		Normal	900	needleandthread	20			
		Unfavorable	600	Indian ricegrass	10			
				other perennial grasses	10			
				antelope bitterbrush	5			
				other perennial forbs	5			
				other shrubs	5			
Yamo------------	Clayey Foothills	Favorable	1,200	western wheatgrass	30		---	---
		Normal	900	Wyoming big sagebrush	15			
		Unfavorable	600	bluebunch wheatgrass	10			
				yellow rabbitbrush	5			
Crestman--------	Sandy Juniper	Favorable	---	Wyoming big sagebrush		15	Utah juniper	65
		Normal	---	streambank wheatgrass		15	twoneedle pinyon	65
		Unfavorable	---	antelope bitterbrush		10		
				needleleaf sedge		10		
				Indian ricegrass		5		
				Truckee rabbitbrush		5		
				bluebunch wheatgrass		5		
				bottlebrush squirreltail		5		
				needleandthread		5		
				prairie Junegrass		5		
				western wheatgrass		5		

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
92:								
Grimm----------	Gravelly 7-14" PPT	Favorable	600	bluebunch wheatgrass	25		---	---
		Normal	500	black sagebrush	15			
		Unfavorable	400	Indian ricegrass	10			
				needleandthread	10			
				prairie Junegrass	10			
				streambank wheatgrass	10			
Ustic Torriorthents--	---	Favorable	---				---	---
		Normal	---					
		Unfavorable	---					
93:								
Gullied land----	---	Favorable	---				---	---
		Normal	---					
		Unfavorable	---					
94:								
Hapney----------	Salt Flats	Favorable	900	alkali sacaton	20		---	---
		Normal	625	inland saltgrass	15			
		Unfavorable	450	Wyoming big sagebrush	10			
				western wheatgrass	10			
				basin wildrye	5			
				bottlebrush squirreltail	5			
				greasewood	5			
95:								
Haterton--------	Alkali Upland	Favorable	650	Gardner's saltbush	45		---	---
		Normal	400	Indian ricegrass	10			
		Unfavorable	350	western wheatgrass	10			
				streambank wheatgrass	8			
Piezon----------	Rolling Loam	Favorable	1,000	western wheatgrass	20		---	---
		Normal	700	Wyoming big sagebrush	15			
		Unfavorable	500	needleandthread	10			
				Indian ricegrass	5			
				Nevada bluegrass	5			
				bottlebrush squirreltail	5			
				prairie Junegrass	5			
96:								
Heathcoat-------	Mountain Loam	Favorable	1,800	Letterman's needlegrass	15		---	---
		Normal	1,500	mountain big sagebrush	10			
		Unfavorable	1,200	slender wheatgrass	10			
				brome	5			
				mountain snowberry	5			
				muttongrass	5			
				nodding brome	5			
97:								
Heathcoat-------	Mountain Loam	Favorable	1,800	Letterman's needlegrass	15		---	---
		Normal	1,500	mountain big sagebrush	10			
		Unfavorable	1,200	slender wheatgrass	10			
				brome	5			
				mountain snowberry	5			
				muttongrass	5			
				nodding brome	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
97:								
Clayburn--------	Brushy Loam	Favorable	3,000	Gambel's oak	15		---	---
		Normal	2,000	Saskatoon serviceberry	10			
		Unfavorable	1,500	mountain brome	10			
				other shrubs	10			
				Letterman's needlegrass	5			
				elk sedge	5			
				mountain snowberry	5			
				nodding brome	5			
				other perennial forbs	5			
				other perennial grasses	5			
				slender wheatgrass	5			
98:								
Herm------------	Deep Clay Loam	Favorable	1,600	western wheatgrass	25		---	---
		Normal	1,200	Letterman's needlegrass	10			
		Unfavorable	800	mountain big sagebrush	5			
				mountain brome	5			
				mountain snowberry	5			
				muttongrass	5			
				prairie Junegrass	5			
Fughes----------	Mountain Loam	Favorable	1,800	Letterman's needlegrass	10		---	---
		Normal	1,500	mountain big sagebrush	10			
		Unfavorable	1,200	Saskatoon serviceberry	5			
				elk sedge	5			
				mountain brome	5			
				mountain snowberry	5			
				muttongrass	5			
				slender wheatgrass	5			
99:								
Hesperus--------	Mountain Loam	Favorable	1,800	Letterman's needlegrass	15		---	---
		Normal	1,500	mountain big sagebrush	15			
		Unfavorable	1,200	slender wheatgrass	10			
				western wheatgrass	10			
				elk sedge	5			
				mountain brome	5			
				mountain snowberry	5			
				nodding brome	5			
				other perennial forbs	5			
				other perennial grasses	5			
100:								
Hesperus--------	Brushy Loam	Favorable	3,000	Gambel's oak	10		---	---
		Normal	2,500	Saskatoon serviceberry	10			
		Unfavorable	1,500	elk sedge	10			
				mountain brome	10			
				Letterman's needlegrass	5			
				mountain snowberry	5			
				nodding brome	5			
				other perennial forbs	5			
				other perennial grasses	5			
				slender wheatgrass	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
101:								
Hesperus--------	Brushy Loam	Favorable	3,000	Gambel's oak	10		---	---
		Normal	2,500	Saskatoon serviceberry	10			
		Unfavorable	1,500	elk sedge	10			
				mountain brome	10			
				Letterman's needlegrass	5			
				mountain snowberry	5			
				nodding brome	5			
				other perennial forbs	5			
				other perennial grasses	5			
				slender wheatgrass	5			
102:								
Holter----------	Mountain Loam	Favorable	1,800	slender wheatgrass	15		---	---
		Normal	1,500	Letterman's needlegrass	10			
		Unfavorable	1,200	mountain big sagebrush	10			
				Saskatoon serviceberry	5			
				mountain brome	5			
				mountain snowberry	5			
				prairie Junegrass	5			
Detra-----------	Deep Loam	Favorable	1,800	mountain big sagebrush	15		---	---
		Normal	1,500	needleandthread	15			
		Unfavorable	1,200	western wheatgrass	15			
				Indian ricegrass	5			
				mountain snowberry	5			
				muttongrass	5			
				prairie Junegrass	5			
103:								
Iles------------	Mountain Loam	Favorable	1,800	Letterman's needlegrass	20		---	---
		Normal	1,500	slender wheatgrass	15			
		Unfavorable	1,200	mountain big sagebrush	10			
				mountain brome	10			
				Saskatoon serviceberry	5			
				arrowleaf balsamroot	5			
				bottlebrush squirreltail	5			
				mountain snowberry	5			
				prairie Junegrass	5			
				yellow rabbitbrush	5			
104:								
Ironco----------	Mountain Stony Loam	Favorable	2,400	curlleaf mountain mahogany	20		---	---
		Normal	2,000	Saskatoon serviceberry	10			
		Unfavorable	1,800	mountain brome	10			
				slender wheatgrass	10			
				elk sedge	5			
				mountain big sagebrush	5			
				mountain snowberry	5			
				oniongrass	5			
				true mountain mahogany	5			
Mulgon----------	Douglas Fir	Favorable	---	elk sedge		15	Rocky Mountain Douglas-fir	60
		Normal	---	mountain brome		10		
		Unfavorable	---	nodding brome		10		
				Saskatoon serviceberry		5		
				mountain snowberry		5		

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
105:								
Ironsprings-----	Sandy Foothills	Favorable	1,200	needleandthread	20		---	---
		Normal	1,000	Wyoming big sagebrush	15			
		Unfavorable	600	Indian ricegrass	10			
				antelope bitterbrush	10			
				western wheatgrass	10			
				arrowleaf balsamroot	5			
				bottlebrush squirreltail	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				prairie Junegrass	5			
106:								
Ironsprings-----	Deep Loam	Favorable	1,800	Wyoming big sagebrush	15		---	---
		Normal	1,500	needleandthread	15			
		Unfavorable	900	western wheatgrass	15			
				other perennial forbs	10			
				Indian ricegrass	5			
				mountain snowberry	5			
				muttongrass	5			
				other perennial grasses	5			
				other shrubs	5			
				prairie Junegrass	5			
107:								
Ironsprings-----	Sandyland	Favorable	1,200	antelope bitterbrush	20		---	---
		Normal	1,000	Wyoming big sagebrush	15			
		Unfavorable	600	needleandthread	15			
				Indian ricegrass	10			
				other perennial forbs	5			
				other perennial grasses	5			
				prairie Junegrass	5			
				western wheatgrass	5			
Maysprings------	Sandyland	Favorable	1,200	antelope bitterbrush	20		---	---
		Normal	1,000	Wyoming big sagebrush	15			
		Unfavorable	600	needleandthread	15			
				Indian ricegrass	10			
				bluebunch wheatgrass	5			
				other perennial forbs	5			
				other perennial grasses	5			
				prairie Junegrass	5			
				western wheatgrass	5			
Gretdivid-------	Sandyland	Favorable	1,000	Wyoming big sagebrush	15		---	---
		Normal	850	antelope bitterbrush	15			
		Unfavorable	700	needleandthread	15			
				Indian ricegrass	10			
				western wheatgrass	10			
				bottlebrush squirreltail	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				prairie Junegrass	5			
				streambank wheatgrass	5			
				streambank wheatgrass	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
108:								
Jerry----------	Brushy Loam	Favorable	3,000	Gambel's oak	20		---	---
		Normal	2,000	Saskatoon serviceberry	10			
		Unfavorable	1,500	elk sedge	10			
				mountain brome	10			
				Letterman's needlegrass	5			
				mountain snowberry	5			
				nodding brome	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				slender wheatgrass	5			
Cochetopa-------	Brushy Loam	Favorable	3,000	Gambel's oak	10		---	---
		Normal	2,000	Letterman's needlegrass	10			
		Unfavorable	1,500	Saskatoon serviceberry	10			
				Woods' rose	5			
				elk sedge	5			
				mountain brome	5			
				mountain snowberry	5			
				nodding brome	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				slender wheatgrass	5			
109:								
Joebas----------	Sandy Juniper	Favorable	---	bluebunch wheatgrass		10	Utah juniper	65
		Normal	---	needleandthread		10	twoneedle pinyon	65
		Unfavorable	---	Indian ricegrass		5		
				Wyoming big sagebrush		5		
				antelope bitterbrush		5		
				bottlebrush squirreltail		5		
				western wheatgrass		5		
Rock outcrop----	---	Favorable	---				---	---
		Normal	---					
		Unfavorable	---					
110:								
Kemmerer--------	Clayey Slopes	Favorable	800	western wheatgrass	20		---	---
		Normal	650	other shrubs	10			
		Unfavorable	400	saline wildrye	10			
				shadscale saltbush	10			
				Indian ricegrass	5			
				Sandberg bluegrass	5			
				Wyoming big sagebrush	5			
				other perennial forbs	5			
				other perennial grasses	5			
				prairie Junegrass	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
111:								
Kemmerer--------	Foothills Juniper	Favorable	---	other perennial grasses		10	Utah juniper	90
		Normal	---	western wheatgrass		10	twoneedle pinyon	90
		Unfavorable	---	Indian ricegrass		5		
				Sandberg bluegrass		5		
				bottlebrush squirreltail		5		
				other perennial forbs		5		
				other shrubs		5		
				prairie Junegrass		5		
				shadscale saltbush		5		
				streambank wheatgrass		5		
Grapit----------	Foothills Juniper	Favorable	---	saline wildrye		20	Utah juniper	90
		Normal	---	Nevada bluegrass		15	twoneedle pinyon	90
		Unfavorable	---	other perennial grasses		10		
				prairie Junegrass		10		
				western wheatgrass		10		
				bluebunch wheatgrass		5		
				mountain big sagebrush		5		
				true mountain mahogany		5		
112:								
Kemmerer--------	Clayey Slopes	Favorable	800	western wheatgrass	20		---	---
		Normal	650	other shrubs	10			
		Unfavorable	400	saline wildrye	10			
				shadscale saltbush	10			
				Indian ricegrass	5			
				Sandberg bluegrass	5			
				Wyoming big sagebrush	5			
				other perennial forbs	5			
				other perennial grasses	5			
				prairie Junegrass	5			
Moyerson--------	Clayey Slopes	Favorable	800	western wheatgrass	25		---	---
		Normal	650	saline wildrye	15			
		Unfavorable	400	bottlebrush squirreltail	10			
				shadscale saltbush	10			
				Indian ricegrass	5			
				Wyoming big sagebrush	5			
				prairie Junegrass	5			
113:								
Kemmerer--------	Clayey Slopes	Favorable	800	western wheatgrass	20		---	---
		Normal	650	other shrubs	10			
		Unfavorable	400	saline wildrye	10			
				shadscale saltbush	10			
				Indian ricegrass	5			
				Sandberg bluegrass	5			
				Wyoming big sagebrush	5			
				other perennial forbs	5			
				other perennial grasses	5			
				prairie Junegrass	5			
Yamo------------	Clayey Foothills	Favorable	1,200	western wheatgrass	30		---	---
		Normal	900	Wyoming big sagebrush	15			
		Unfavorable	600	bluebunch wheatgrass	10			
				yellow rabbitbrush	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
114:								
Lamphier--------	Brushy Loam	Favorable	3,000	Gambel's oak	20		---	---
		Normal	2,000	Saskatoon serviceberry	10			
		Unfavorable	1,500	elk sedge	10			
				mountain snowberry	10			
				Letterman's needlegrass	5			
				mountain brome	5			
				nodding brome	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				slender wheatgrass	5			
115:								
Lamphier--------	Brushy Loam	Favorable	3,000	Gambel's oak	20		---	---
		Normal	2,000	Saskatoon serviceberry	10			
		Unfavorable	1,500	elk sedge	10			
				mountain snowberry	10			
				Letterman's needlegrass	5			
				mountain brome	5			
				nodding brome	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				slender wheatgrass	5			
116:								
Lamphier--------	Brushy Loam	Favorable	3,000	Gambel's oak	20		---	---
		Normal	2,000	Saskatoon serviceberry	10			
		Unfavorable	1,500	elk sedge	10			
				mountain snowberry	10			
				Letterman's needlegrass	5			
				mountain brome	5			
				nodding brome	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				slender wheatgrass	5			
Jerry-----------	Brushy Loam	Favorable	3,000	Gambel's oak	20		---	---
		Normal	2,000	Saskatoon serviceberry	10			
		Unfavorable	1,500	elk sedge	10			
				mountain brome	10			
				Letterman's needlegrass	5			
				mountain snowberry	5			
				nodding brome	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				slender wheatgrass	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
117:								
Lamphier--------	Brushy Loam	Favorable	3,000	Gambel's oak	20		---	---
		Normal	2,000	Saskatoon serviceberry	10			
		Unfavorable	1,500	elk sedge	10			
				mountain snowberry	10			
				Letterman's needlegrass	5			
				mountain brome	5			
				nodding brome	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				slender wheatgrass	5			
Jerry-----------	Brushy Loam	Favorable	3,000	Gambel's oak	20		---	---
		Normal	2,000	Saskatoon serviceberry	10			
		Unfavorable	1,500	elk sedge	10			
				mountain brome	10			
				Letterman's needlegrass	5			
				mountain snowberry	5			
				nodding brome	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				slender wheatgrass	5			
118:								
Lander----------	River Bottom	Favorable	2,000	basin wildrye	15		---	---
		Normal	1,700	other shrubs	15			
		Unfavorable	1,500	western wheatgrass	15			
				slender wheatgrass	10			
				Nebraska sedge	5			
119:								
Langspring------	Loamy 7-10" PPT	Favorable	725	Wyoming big sagebrush	15		---	---
		Normal	575	streambank wheatgrass	15			
		Unfavorable	300	Indian ricegrass	10			
				bottlebrush squirreltail	10			
				shadscale saltbush	10			
				streambank wheatgrass	10			
				needleandthread	5			
				western wheatgrass	5			
120:								
Layoint---------	Sandy Foothill	Favorable	1,200	needleandthread	20		---	---
		Normal	1,000	mountain big sagebrush	15			
		Unfavorable	600	Indian ricegrass	10			
				western wheatgrass	10			
				antelope bitterbrush	5			
				bottlebrush squirreltail	5			
				other perennial forbs	5			
				other perennial grasses	5			
Moosed----------	Sandy Foothill	Favorable	1,000	needleandthread	30		---	---
		Normal	800	Wyoming big sagebrush	25			
		Unfavorable	400	Indian ricegrass	10			
				antelope bitterbrush	5			
				bottlebrush squirreltail	5			
				galleta	5			
				other perennial forbs	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
120:								
Berlake---------	Deep Loam	Favorable	1,800	needleandthread	15		---	---
		Normal	1,500	western wheatgrass	15			
		Unfavorable	900	mountain big sagebrush	10			
				other perennial forbs	10			
				Indian ricegrass	5			
				common snowberry	5			
				mountain snowberry	5			
				muttongrass	5			
				other perennial grasses	5			
				prairie Junegrass	5			
121:								
Leaps-----------	Aspen	Favorable	---	mountain brome		10	quaking aspen	65
		Normal	---	nodding brome		10		
		Unfavorable	---	quaking aspen		10		
				Fendler's meadowrue		5		
				blue wildrye		5		
				elk sedge		5		
				slender wheatgrass		5		
122:								
Leswill---------	Alkali Upland	Favorable	600	saltbush	30		---	---
		Normal	400	streambank wheatgrass	10			
		Unfavorable	350	streambank wheatgrass	10			
				western wheatgrass	10			
				Indian ricegrass	5			
				bottlebrush squirreltail	5			
				shadscale saltbush	5			
Rogrube---------	Loamy 7-10" PPT	Favorable	725	Wyoming big sagebrush	15		---	---
		Normal	600	streambank wheatgrass	15			
		Unfavorable	300	Indian ricegrass	10			
				bottlebrush squirreltail	10			
				needleandthread	10			
				shadscale saltbush	10			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				western wheatgrass	5			
123:								
Lilsnake--------	Loamy 7-10" PPT	Favorable	625	shadscale saltbush	15		---	---
		Normal	500	Indian ricegrass	10			
		Unfavorable	375	Wyoming big sagebrush	10			
				needleandthread	10			
				streambank wheatgrass	10			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				streambank wheatgrass	5			
				western wheatgrass	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
123:								
Sandwash--------	Loamy 7-10" PPT	Favorable	725	Wyoming big sagebrush	15		---	---
		Normal	575	bottlebrush squirreltail	10			
		Unfavorable	300	shadscale saltbush	10			
				streambank wheatgrass	10			
				streambank wheatgrass	10			
				Indian ricegrass	5			
				Nevada bluegrass	5			
				bluebunch wheatgrass	5			
				needleandthread	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				western wheatgrass	5			
124:								
Losee-----------	Dry Exposure	Favorable	500	black sagebrush	15		---	---
		Normal	400	bluebunch wheatgrass	15			
		Unfavorable	200	other perennial grasses	15			
				needleandthread	10			
				prairie Junegrass	10			
				western wheatgrass	10			
				other perennial forbs	5			
				other shrubs	5			
Thornburgh------	Stony Loam	Favorable	2,000	western wheatgrass	15		---	---
		Normal	1,500	antelope bitterbrush	10			
		Unfavorable	1,200	bluebunch wheatgrass	10			
				mountain big sagebrush	10			
				prairie Junegrass	10			
				Indian ricegrass	5			
				muttongrass	5			
				needleandthread	5			
125:								
Massadona-------	Clayey Slopes	Favorable	600	western wheatgrass	20		---	---
		Normal	500	Gardner's saltbush	15			
		Unfavorable	300	saline wildrye	15			
				shadscale saltbush	15			
				mat saltbush	10			
				Wyoming big sagebrush	5			
				bottlebrush squirreltail	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
126:								
Massadona-------	Semidesert Clay Loam	Favorable	600	western wheatgrass	25		---	---
		Normal	450	Wyoming big sagebrush	15			
		Unfavorable	275	saline wildrye	15			
				bottlebrush squirreltail	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				prairie Junegrass	5			
				shadscale saltbush	5			
Youngston-------	Foothill Swale	Favorable	2,500	basin wildrye	30		---	---
		Normal	1,800	basin big sagebrush	10			
		Unfavorable	1,000	streambank wheatgrass	10			
				western wheatgrass	10			
				winterfat	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
127:								
Maudlin---------	Mountain Loam	Favorable	1,800	Letterman's needlegrass	15		---	---
		Normal	1,500	mountain big sagebrush	15			
		Unfavorable	1,200	elk sedge	10			
				nodding brome	10			
				other perennial forbs	10			
				mountain brome	5			
				mountain snowberry	5			
				other perennial grasses	5			
				other shrubs	5			
				slender wheatgrass	5			
Duffymont-------	Loamy Breaks	Favorable	800	mountain big sagebrush	15		---	---
		Normal	500	western wheatgrass	15			
		Unfavorable	400	antelope bitterbrush	10			
				true mountain mahogany	10			
				Indian ricegrass	5			
				Nevada bluegrass	5			
				Saskatoon serviceberry	5			
				bluebunch wheatgrass	5			
				needleandthread	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
128:								
Maybell---------	Sandhills	Favorable	1,200	antelope bitterbrush	25		---	---
		Normal	850	silver sagebrush	15			
		Unfavorable	600	Indian ricegrass	10			
				needleandthread	10			
				Wyoming big sagebrush	5			
				other perennial forbs	5			
				other perennial grasses	5			
				rabbitbrush	5			
				sand dropseed	5			
				western wheatgrass	5			
129:								
Maybell---------	Sandhills	Favorable	1,200	antelope bitterbrush	25		---	---
		Normal	850	silver sagebrush	15			
		Unfavorable	600	Indian ricegrass	10			
				needleandthread	10			
				Wyoming big sagebrush	5			
				other perennial forbs	5			
				other perennial grasses	5			
				rabbitbrush	5			
				sand dropseed	5			
				western wheatgrass	5			
130:								
Maysprings------	Rolling Loam	Favorable	1,000	Wyoming big sagebrush	15		---	---
		Normal	800	needleandthread	10			
		Unfavorable	500	other perennial forbs	10			
				bluebunch wheatgrass	5			
				bottlebrush squirreltail	5			
				other perennial grasses	5			
				prairie Junegrass	5			
				western wheatgrass	5			
				yellow rabbitbrush	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
131:								
Maysprings------	Sandyland	Favorable	1,200	antelope bitterbrush	20		---	---
		Normal	1,000	Wyoming big sagebrush	15			
		Unfavorable	600	needleandthread	15			
				Indian ricegrass	10			
				bluebunch wheatgrass	5			
				other perennial forbs	5			
				other perennial grasses	5			
				prairie Junegrass	5			
				western wheatgrass	5			
Gretdivid-------	Sandyland	Favorable	1,000	Wyoming big sagebrush	15		---	---
		Normal	850	antelope bitterbrush	15			
		Unfavorable	700	needleandthread	15			
				Indian ricegrass	10			
				western wheatgrass	10			
				bottlebrush squirreltail	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				prairie Junegrass	5			
				streambank wheatgrass	5			
				streambank wheatgrass	5			
132:								
Milren----------	Claypan	Favorable	800	alkali sagebrush	35		---	---
		Normal	500	western wheatgrass	15			
		Unfavorable	300	bluebunch wheatgrass	5			
				prairie Junegrass	5			
133:								
Miracle---------	Mountain Loam	Favorable	1,800	Letterman's needlegrass	15		---	---
		Normal	1,500	slender wheatgrass	15			
		Unfavorable	1,200	mountain big sagebrush	10			
				elk sedge	5			
				mountain brome	5			
				mountain snowberry	5			
				nodding brome	5			
Coldspring------	Mountain Loam	Favorable	1,800	Letterman's needlegrass	15		---	---
		Normal	1,500	slender wheatgrass	15			
		Unfavorable	1,200	mountain big sagebrush	10			
				other perennial forbs	10			
				elk sedge	5			
				mountain brome	5			
				mountain snowberry	5			
				nodding brome	5			
				other perennial grasses	5			
				other shrubs	5			
				prairie Junegrass	5			
134:								
Morapos---------	Mountain Loam	Favorable	1,800	Letterman's needlegrass	15		---	---
		Normal	1,500	mountain big sagebrush	10			
		Unfavorable	1,200	mountain snowberry	10			
				other perennial grasses	10			
				slender wheatgrass	10			
				Saskatoon serviceberry	5			
				other perennial forbs	5			
				other shrubs	5			
				prairie Junegrass	5			
				western wheatgrass	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Rangeland	Forest		
			Lb/acre		Pct.	Pct.		
135:								
Morapos	Mountain Loam	Favorable	1,800	Letterman's needlegrass	15		---	---
		Normal	1,500	mountain big sagebrush	10			
		Unfavorable	1,200	mountain snowberry	10			
				other perennial grasses	10			
				slender wheatgrass	10			
				Saskatoon serviceberry	5			
				other perennial forbs	5			
				other shrubs	5			
				prairie Junegrass	5			
				western wheatgrass	5			
136:								
Morapos	Deep Clay Loam	Favorable	2,500	western wheatgrass	15		---	---
		Normal	2,000	Letterman's needlegrass	10			
		Unfavorable	1,500	mountain big sagebrush	10			
				muttongrass	10			
				slender wheatgrass	10			
				Saskatoon serviceberry	5			
				mountain snowberry	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				prairie Junegrass	5			
Pagoda	Mountain Loam	Favorable	1,800	Letterman's needlegrass	15		---	---
		Normal	1,500	slender wheatgrass	15			
		Unfavorable	1,200	mountain brome	10			
				Utah serviceberry	5			
				mountain big sagebrush	5			
				mountain snowberry	5			
				nodding brome	5			
137:								
Morset	Mountain Loam	Favorable	1,800	Letterman's needlegrass	15		---	---
		Normal	1,500	slender wheatgrass	15			
		Unfavorable	1,200	mountain big sagebrush	10			
				other perennial forbs	10			
				elk sedge	5			
				mountain brome	5			
				mountain snowberry	5			
				nodding brome	5			
				other perennial grasses	5			
				other shrubs	5			
				prairie Junegrass	5			
Youga	Mountain Loam	Favorable	1,800	Letterman's needlegrass	15		---	---
		Normal	1,500	slender wheatgrass	15			
		Unfavorable	1,200	mountain big sagebrush	10			
				elk sedge	5			
				mountain brome	5			
				mountain snowberry	5			
				nodding brome	5			
				prairie Junegrass	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
138:								
Moyerson--------	Clayey Slopes	Favorable	800	western wheatgrass	25		---	---
		Normal	650	saline wildrye	15			
		Unfavorable	400	bottlebrush squirreltail	10			
				shadscale saltbush	10			
				Indian ricegrass	5			
				Wyoming big sagebrush	5			
				prairie Junegrass	5			
Rentsac---------	Foothill Juniper	Favorable	---	bluebunch wheatgrass		15	Utah juniper	65
		Normal	---	Wyoming big sagebrush		10	twoneedle pinyon	65
		Unfavorable	---	antelope bitterbrush		10		
				Indian ricegrass		5		
				bottlebrush squirreltail		5		
				needleandthread		5		
				prairie Junegrass		5		
				streambank wheatgrass		5		
				western wheatgrass		5		
139:								
Muggins---------	Lodgepole Pine	Favorable	---	elk sedge		15	lodgepole pine	50
		Normal	---	grouse whortleberry		10		
		Unfavorable	---	Fendler's meadowrue		5		
				blue wildrye		5		
				creeping juniper		5		
				heartleaf arnica		5		
				mountain snowberry		5		
140:								
Ninot-----------	Dry Mountain Loam	Favorable	1,000	other perennial grasses	20		---	---
		Normal	750	mountain big sagebrush	15			
		Unfavorable	500	streambank wheatgrass	15			
				Letterman's needlegrass	10			
				Nevada bluegrass	10			
				needleandthread	10			
				other perennial forbs	5			
				other shrubs	5			
				prairie Junegrass	5			
Crago-----------	Dry Exposure	Favorable	500	bluebunch wheatgrass	15		---	---
		Normal	400	black sagebrush	10			
		Unfavorable	200	needleandthread	10			
				other perennial grasses	10			
				prairie Junegrass	10			
				western wheatgrass	10			
				other perennial forbs	5			
				other shrubs	5			
Garlips---------	Mountain Loam	Favorable	1,800	Letterman's needlegrass	15		---	---
		Normal	1,500	mountain big sagebrush	15			
		Unfavorable	1,200	slender wheatgrass	15			
				elk sedge	5			
				mountain brome	5			
				mountain snowberry	5			
				nodding brome	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				prairie Junegrass	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
141:								
Nortez----------	Mountain Loam	Favorable	1,800	slender wheatgrass	15		---	---
		Normal	1,500	Letterman's needlegrass	10			
		Unfavorable	1,200	mountain big sagebrush	10			
				mountain brome	5			
				mountain snowberry	5			
Morapos----------	Mountain Loam	Favorable	1,800	Letterman's needlegrass	15		---	---
		Normal	1,500	mountain big sagebrush	10			
		Unfavorable	1,200	mountain snowberry	10			
				other perennial grasses	10			
				slender wheatgrass	10			
				Saskatoon serviceberry	5			
				other perennial forbs	5			
				other shrubs	5			
				prairie Junegrass	5			
				western wheatgrass	5			
142:								
Nortez----------	Mountain Loam	Favorable	1,800	slender wheatgrass	15		---	---
		Normal	1,500	Letterman's needlegrass	10			
		Unfavorable	1,200	mountain big sagebrush	10			
				mountain brome	5			
				mountain snowberry	5			
Morapos----------	Mountain Loam	Favorable	1,800	Letterman's needlegrass	15		---	---
		Normal	1,500	mountain big sagebrush	10			
		Unfavorable	1,200	mountain snowberry	10			
				other perennial grasses	10			
				slender wheatgrass	10			
				Saskatoon serviceberry	5			
				other perennial forbs	5			
				other shrubs	5			
				prairie Junegrass	5			
				western wheatgrass	5			
143:								
Nunemaker--------	Claypan	Favorable	800	alkali sagebrush	35		---	---
		Normal	500	western wheatgrass	15			
		Unfavorable	400	bluebunch wheatgrass	5			
				prairie Junegrass	5			
144:								
Pagoda----------	Deep Clay Loam	Favorable	2,500	western wheatgrass	15		---	---
		Normal	2,000	Letterman's needlegrass	10			
		Unfavorable	1,500	mountain big sagebrush	10			
				muttongrass	10			
				slender wheatgrass	10			
				mountain snowberry	5			
				prairie Junegrass	5			
145:								
Pagoda----------	Deep Clay Loam	Favorable	2,500	western wheatgrass	15		---	---
		Normal	2,000	Letterman's needlegrass	10			
		Unfavorable	1,500	mountain big sagebrush	10			
				muttongrass	10			
				slender wheatgrass	10			
				mountain snowberry	5			
				prairie Junegrass	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
146:								
Pavillion-------	Semidesert Loam	Favorable	750	Wyoming big sagebrush	15		---	---
		Normal	600	other perennial grasses	15			
		Unfavorable	500	bottlebrush squirreltail	10			
				shadscale saltbush	10			
				western wheatgrass	10			
				Sandberg bluegrass	5			
				other perennial forbs	5			
				saline wildrye	5			
				saltbush	5			
Degater---------	Clayey Slopes	Favorable	600	western wheatgrass	25		---	---
		Normal	500	other perennial forbs	10			
		Unfavorable	300	saline wildrye	10			
				shadscale saltbush	10			
				Gardner's saltbush	5			
				Wyoming big sagebrush	5			
				bottlebrush squirreltail	5			
				other perennial grasses	5			
147:								
Peeler----------	Subalpine Fir	Favorable	---	grouse whortleberry		30	Engelmann's spruce	80
		Normal	---	elk sedge		20	subalpine fir	80
		Unfavorable	---	thimbleberry		20		
				heartleaf arnica		10		
148:								
Pilotpeak-------	Shallow Slopes	Favorable	800	western wheatgrass	20		---	---
		Normal	650	streambank wheatgrass	15			
		Unfavorable	500	bluebunch wheatgrass	10			
				bottlebrush squirreltail	10			
				black sagebrush	5			
				needleandthread	5			
				prairie Junegrass	5			
				winterfat	5			
Grubrob---------	Shallow Slopes	Favorable	800	western wheatgrass	20		---	---
		Normal	650	streambank wheatgrass	15			
		Unfavorable	500	bottlebrush squirreltail	10			
				black sagebrush	5			
				bluebunch wheatgrass	5			
				needleandthread	5			
				prairie Junegrass	5			
				winterfat	5			
149:								
Pinelli---------	Clayey Foothills	Favorable	1,200	western wheatgrass	40		---	---
		Normal	900	Wyoming big sagebrush	5			
		Unfavorable	600	bottlebrush squirreltail	5			
				prairie Junegrass	5			
150:								
Pinelli---------	Claypan	Favorable	800	alkali sagebrush	35		---	---
		Normal	500	western wheatgrass	10			
		Unfavorable	300	Wyoming big sagebrush	5			
				bluebunch wheatgrass	5			
				bottlebrush squirreltail	5			
				prairie Junegrass	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
151:								
Pinelli---------	Clayey Foothills	Favorable	1,200	western wheatgrass	40		---	---
		Normal	900	Wyoming big sagebrush	5			
		Unfavorable	600	bottlebrush squirreltail	5			
				prairie Junegrass	5			
152:								
Pinridge--------	Foothill Swale	Favorable	3,000	basin wildrye	30		---	---
		Normal	2,000	basin big sagebrush	10			
		Unfavorable	1,000	western wheatgrass	10			
				Indian ricegrass	5			
				other perennial forbs	5			
				other perennial grasses	5			
				rubber rabbitbrush	5			
153:								
Pricecreek------	Clayey Foothills	Favorable	1,200	western wheatgrass	40		---	---
		Normal	900	Wyoming big sagebrush	20			
		Unfavorable	600	bluebunch wheatgrass	5			
				bottlebrush squirreltail	5			
				muttongrass	5			
154:								
Quealman--------	Sandy Swale	Favorable	2,500	basin wildrye	40		---	---
		Normal	2,000	western wheatgrass	15			
		Unfavorable	1,500	other perennial grasses	10			
				basin big sagebrush	5			
				inland saltgrass	5			
				other perennial forbs	5			
				other shrubs	5			
155:								
Rencot----------	Dry Exposure	Favorable	625	bluebunch wheatgrass	25		---	---
		Normal	500	black sagebrush	15			
		Unfavorable	375	prairie Junegrass	10			
				Indian ricegrass	5			
				Sandberg bluegrass	5			
				bottlebrush squirreltail	5			
				needleandthread	5			
				western wheatgrass	5			
Duffymont-------	Stony Loam	Favorable	2,000	bluebunch wheatgrass	15		---	---
		Normal	1,200	Letterman's needlegrass	10			
		Unfavorable	1,000	antelope bitterbrush	10			
				mountain big sagebrush	10			
				Indian ricegrass	5			
				Saskatoon serviceberry	5			
				muttongrass	5			
				needleandthread	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				western wheatgrass	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
156:								
Rentsac---------	Foothill Juniper	Favorable	---	bluebunch wheatgrass		15	Utah juniper	65
		Normal	---	Wyoming big sagebrush		10	twoneedle pinyon	65
		Unfavorable	---	antelope bitterbrush		10		
				Indian ricegrass		5		
				bottlebrush squirreltail		5		
				needleandthread		5		
				prairie Junegrass		5		
				streambank wheatgrass		5		
				western wheatgrass		5		
157:								
Rentsac---------	Foothill Juniper	Favorable	---	bluebunch wheatgrass		15	Utah juniper	65
		Normal	---	Wyoming big sagebrush		10	twoneedle pinyon	65
		Unfavorable	---	antelope bitterbrush		10		
				Indian ricegrass		5		
				bottlebrush squirreltail		5		
				needleandthread		5		
				prairie Junegrass		5		
				streambank wheatgrass		5		
				western wheatgrass		5		
Moyerson--------	Foothill Juniper	Favorable	---	western wheatgrass		25	Utah juniper	65
		Normal	---	bluebunch wheatgrass		10	twoneedle pinyon	65
		Unfavorable	---	Indian ricegrass		5		
				Wyoming big sagebrush		5		
				bottlebrush squirreltail		5		
				prairie Junegrass		5		
158:								
Rock outcrop----	Foothill Juniper	Favorable	---				---	---
		Normal	---					
		Unfavorable	---					
Earsman---------	---	Favorable	---	Wyoming big sagebrush		10	twoneedle pinyon	60
		Normal	---	bluebunch wheatgrass		10	Utah juniper	---
		Unfavorable	---	Indian ricegrass		5		
				antelope bitterbrush		5		
				bottlebrush squirreltail		5		
				needleandthread		5		
				true mountain mahogany		5		
159:								
Rock outcrop----	---	Favorable	---				---	---
		Normal	---					
		Unfavorable	---					
Haploborolls----	---	Favorable	1,500	bluegrass	10		---	---
		Normal	---	brome	10			
		Unfavorable	800	mountainmahogany	10			
				needlegrass	10			
				sagebrush	10			
				wheatgrass	10			
160:								
Rock outcrop----	---	Favorable	---				---	---
		Normal	---					
		Unfavorable	---					

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
160:								
Torriorthents---	---	Favorable	350	Wyoming big sagebrush	15		---	---
		Normal	275	Indian ricegrass	10			
		Unfavorable	175	bottlebrush squirreltail	10			
				saltbush	10			
				needleandthread	5			
				shadscale	5			
				bud sagebrush				
				western wheatgrass				
161:								
Rock River------	Rolling Loam	Favorable	1,000	Wyoming big sagebrush	15		---	---
		Normal	800	needleandthread	15			
		Unfavorable	500	Indian ricegrass	10			
				western wheatgrass	10			
				Nevada bluegrass	5			
				bottlebrush squirreltail	5			
				prairie Junegrass	5			
162:								
Rock River------	Rolling Loam	Favorable	1,000	Wyoming big sagebrush	15		---	---
		Normal	800	needleandthread	15			
		Unfavorable	500	Indian ricegrass	10			
				western wheatgrass	10			
				Nevada bluegrass	5			
				bottlebrush squirreltail	5			
				prairie Junegrass	5			
163:								
Rock River------	Rolling Loam	Favorable	1,000	Wyoming big sagebrush	15		---	---
		Normal	800	needleandthread	15			
		Unfavorable	500	Indian ricegrass	10			
				western wheatgrass	10			
				Nevada bluegrass	5			
				bottlebrush squirreltail	5			
				prairie Junegrass	5			
164:								
Rock River------	Shallow Slopes	Favorable	800	streambank wheatgrass	15		---	---
		Normal	650	western wheatgrass	15			
		Unfavorable	500	bluebunch wheatgrass	10			
				black sagebrush	5			
				bottlebrush squirreltail	5			
				muttongrass	5			
				needleandthread	5			
				prairie Junegrass	5			
				winterfat	5			
Taffom----------	Rolling Loam	Favorable	1,000	Wyoming big sagebrush	15		---	---
		Normal	800	needleandthread	15			
		Unfavorable	500	western wheatgrass	15			
				prairie Junegrass	10			
				Indian ricegrass	5			
				Nevada bluegrass	5			
				bluebunch wheatgrass	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
165:								
Rogrube---------	Loamy 7-10" PPT	Favorable	725	Wyoming big sagebrush	15		---	---
		Normal	600	streambank wheatgrass	15			
		Unfavorable	300	Indian ricegrass	10			
				bottlebrush squirreltail	10			
				needleandthread	10			
				shadscale saltbush	10			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				western wheatgrass	5			
Rogrube---------	Clayey 9-11" PPT	Favorable	625	streambank wheatgrass	20		---	---
		Normal	550	western wheatgrass	20			
		Unfavorable	475	streambank wheatgrass	15			
				bottlebrush squirreltail	10			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
166:								
Routt-----------	Brushy Loam	Favorable	3,000	Gambel's oak	10		---	---
		Normal	2,000	Saskatoon serviceberry	10			
		Unfavorable	1,500	mountain brome	10			
				Letterman's needlegrass	5			
				elk sedge	5			
				mountain snowberry	5			
				nodding brome	5			
				slender wheatgrass	5			
167:								
Routt-----------	Brushy Loam	Favorable	3,000	Gambel's oak	10		---	---
		Normal	2,000	Saskatoon serviceberry	10			
		Unfavorable	1,500	mountain brome	10			
				Letterman's needlegrass	5			
				elk sedge	5			
				mountain snowberry	5			
				nodding brome	5			
				slender wheatgrass	5			
Cochetopa-------	Mountain Loam	Favorable	1,800	slender wheatgrass	15		---	---
		Normal	1,500	Letterman's needlegrass	10			
		Unfavorable	1,200	mountain big sagebrush	10			
				elk sedge	5			
				mountain brome	5			
				mountain snowberry	5			
				nodding brome	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
Binco-----------	Deep Clay Loam	Favorable	1,600	western wheatgrass	25		---	---
		Normal	1,200	Letterman's needlegrass	10			
		Unfavorable	800	mountain big sagebrush	10			
				mountain snowberry	10			
				slender wheatgrass	10			
				mountain brome	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
168:								
Ruedloff--------	Sandy	Favorable	600	Wyoming big sagebrush	15		---	---
		Normal	500	needleandthread	15			
		Unfavorable	400	other perennial grasses	10			
				Indian ricegrass	5			
				Nevada bluegrass	5			
				Sandberg bluegrass	5			
				other perennial forbs	5			
				other shrubs	5			
				plains pricklypear	5			
169:								
Ruedloff--------	Sandy	Favorable	600	needleandthread	25		---	---
		Normal	500	other perennial grasses	15			
		Unfavorable	400	Indian ricegrass	10			
				Wyoming big sagebrush	10			
				Nevada bluegrass	5			
				Sandberg bluegrass	5			
				other perennial forbs	5			
				other shrubs	5			
				plains pricklypear	5			
				saltbush	5			
				shadscale saltbush	5			
				winterfat	5			
Dunul-----------	Dry Sandy	Favorable	600	needleandthread	20		---	---
		Normal	500	Indian ricegrass	10			
		Unfavorable	400	black sagebrush	10			
				streambank wheatgrass	10			
				threadleaf sedge	10			
				Nevada bluegrass	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				saltbush	5			
				winterfat	5			
170:								
Ryan Park-------	Sandy Foothills	Favorable	1,200	Wyoming big sagebrush	20		---	---
		Normal	1,000	needleandthread	15			
		Unfavorable	600	Indian ricegrass	10			
				western wheatgrass	10			
				antelope bitterbrush	5			
				bottlebrush squirreltail	5			
				prairie Junegrass	5			
171:								
Ryan Park-------	Sandy Foothills	Favorable	1,200	Wyoming big sagebrush	20		---	---
		Normal	1,000	needleandthread	15			
		Unfavorable	600	Indian ricegrass	10			
				western wheatgrass	10			
				antelope bitterbrush	5			
				bottlebrush squirreltail	5			
				prairie Junegrass	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
172:								
Ryan Park-------	Sandy Foothills	Favorable	1,200	Wyoming big sagebrush	20		---	---
		Normal	1,000	needleandthread	15			
		Unfavorable	600	Indian ricegrass	10			
				western wheatgrass	10			
				antelope bitterbrush	5			
				bottlebrush squirreltail	5			
				prairie Junegrass	5			
Coyet-----------	Sandhills	Favorable	1,200	antelope bitterbrush	20		---	---
		Normal	1,000	needleandthread	15			
		Unfavorable	600	silver sagebrush	15			
				Indian ricegrass	10			
				Wyoming big sagebrush	5			
				galleta	5			
				other perennial forbs	5			
				other perennial grasses	5			
				prairie Junegrass	5			
				sand dropseed	5			
				prairie sagewort	3			
173:								
Ryark-----------	Rolling Loam	Favorable	1,000	Wyoming big sagebrush	15		---	---
		Normal	800	needleandthread	15			
		Unfavorable	500	streambank wheatgrass	10			
				western wheatgrass	10			
				Indian ricegrass	5			
				bluebunch wheatgrass	5			
				bottlebrush squirreltail	5			
				prairie Junegrass	5			
Powderwash------	Rolling Loam	Favorable	1,000	Wyoming big sagebrush	15		---	---
		Normal	800	needleandthread	10			
		Unfavorable	500	prairie Junegrass	10			
				streambank wheatgrass	10			
				western wheatgrass	10			
				Indian ricegrass	5			
				bottlebrush squirreltail	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
174:								
Ryark-----------	Rolling Loam	Favorable	1,000	Wyoming big sagebrush	15		---	---
		Normal	800	needleandthread	15			
		Unfavorable	500	streambank wheatgrass	10			
				western wheatgrass	10			
				Indian ricegrass	5			
				bluebunch wheatgrass	5			
				bottlebrush squirreltail	5			
				prairie Junegrass	5			
Maybell---------	Sandhills	Favorable	1,200	antelope bitterbrush	25		---	---
		Normal	850	silver sagebrush	15			
		Unfavorable	600	Indian ricegrass	10			
				needleandthread	10			
				Wyoming big sagebrush	5			
				other perennial forbs	5			
				other perennial grasses	5			
				rabbitbrush	5			
				sand dropseed	5			
				western wheatgrass	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
175:								
Sandwash--------	Loamy 7-10" PPT	Favorable	725	Wyoming big sagebrush	15		---	---
		Normal	575	bottlebrush squirreltail	10			
		Unfavorable	300	shadscale saltbush	10			
				streambank wheatgrass	10			
				streambank wheatgrass	10			
				Indian ricegrass	5			
				Nevada bluegrass	5			
				bluebunch wheatgrass	5			
				needleandthread	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				western wheatgrass	5			
Langspring------	Loamy 7-10" PPT	Favorable	725	Wyoming big sagebrush	15		---	---
		Normal	575	streambank wheatgrass	15			
		Unfavorable	300	Indian ricegrass	10			
				bottlebrush squirreltail	10			
				shadscale saltbush	10			
				streambank wheatgrass	10			
				needleandthread	5			
				western wheatgrass	5			
Baston----------	Shale	Favorable	450	Gardner's saltbush	35		---	---
		Normal	350	bottlebrush squirreltail	10			
		Unfavorable	200	western wheatgrass	10			
				Indian ricegrass	5			
				Nevada bluegrass	5			
				bud sagebrush	5			
				shadscale saltbush	5			
				streambank wheatgrass	5			
				streambank wheatgrass	5			
176:								
Schooner--------	Sandy Juniper	Favorable	---	Indian ricegrass		15	Utah juniper	60
		Normal	---	bluebunch wheatgrass		15	twoneedle pinyon	60
		Unfavorable	---	antelope bitterbrush		5		
				big sagebrush		5		
				bottlebrush squirreltail		5		
				needleandthread		5		
				other perennial forbs		5		
				other perennial grasses		5		
Rock outcrop----	---	Favorable	---				---	---
		Normal	---					
		Unfavorable	---					
177:								
Schooner--------	Sandy Juniper	Favorable	---	Indian ricegrass		15	Utah juniper	60
		Normal	---	bluebunch wheatgrass		15	twoneedle pinyon	60
		Unfavorable	---	antelope bitterbrush		5		
				big sagebrush		5		
				bottlebrush squirreltail		5		
				needleandthread		5		
				other perennial forbs		5		
				other perennial grasses		5		

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
177:								
Tricera---------	Semidesert Sandy Loam	Favorable	850	needleandthread	20		---	---
		Normal	700	Wyoming big sagebrush	15			
		Unfavorable	500	Indian ricegrass	10			
				sand dropseed	10			
				bottlebrush squirreltail	5			
				streambank wheatgrass	5			
				wormwood	5			
178:								
Simanni---------	Sandy	Favorable	700	needleandthread	15		---	---
		Normal	650	Indian ricegrass	10			
		Unfavorable	400	Wyoming big sagebrush	10			
				streambank wheatgrass	10			
				streambank wheatgrass	10			
				fourwing saltbush	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				shadscale saltbush	5			
				spiny hopsage	5			
				threadleaf sedge	5			
Ruedloff--------	Sandy 9-11" PPT	Favorable	600	needleandthread	25		---	---
		Normal	500	other perennial grasses	15			
		Unfavorable	400	Indian ricegrass	10			
				Wyoming big sagebrush	10			
				Nevada bluegrass	5			
				Sandberg bluegrass	5			
				other perennial forbs	5			
				other shrubs	5			
				plains pricklypear	5			
				saltbush	5			
				shadscale saltbush	5			
				winterfat	5			
179:								
Skyway----------	Brushy Loam	Favorable	3,000	Gambel's oak	10		---	---
		Normal	2,000	Saskatoon serviceberry	10			
		Unfavorable	1,500	elk sedge	10			
				mountain brome	10			
				nodding brome	10			
				common chokecherry	5			
				mountain snowberry	5			
180:								
Spool-----------	Sandyland	Favorable	1,100	Wyoming big sagebrush	20		---	---
		Normal	800	antelope bitterbrush	20			
		Unfavorable	600	needleandthread	15			
				Indian ricegrass	10			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				western wheatgrass	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Rangeland	Forest		
			Lb/acre		Pct.	Pct.		
180:								
Maybell---------	Sandy Foothills	Favorable	1,200	needleandthread	25		---	---
		Normal	1,000	Indian ricegrass	10			
		Unfavorable	600	Wyoming big sagebrush	10			
				other perennial forbs	10			
				western wheatgrass	10			
				antelope bitterbrush	5			
				other perennial grasses	5			
				rabbitbrush	5			
				sand dropseed	5			
181:								
Stunner---------	Rolling Loam	Favorable	1,000	Wyoming big sagebrush	15		---	---
		Normal	800	western wheatgrass	10			
		Unfavorable	500	Indian ricegrass	5			
				bluebunch wheatgrass	5			
				needleandthread	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				prairie Junegrass	5			
				streambank wheatgrass	5			
				streambank wheatgrass	5			
182:								
Stunner---------	Deep Loam	Favorable	1,800	Wyoming big sagebrush	15		---	---
		Normal	1,500	needleandthread	15			
		Unfavorable	900	prairie Junegrass	10			
				western wheatgrass	10			
				Indian ricegrass	5			
				Nevada bluegrass	5			
				Saskatoon serviceberry	5			
				bluebunch wheatgrass	5			
				muttongrass	5			
				other perennial forbs	5			
				other perennial grasses	5			
Emlin-----------	Deep Loam	Favorable	1,800	needleandthread	15		---	---
		Normal	1,500	western wheatgrass	15			
		Unfavorable	900	mountain big sagebrush	10			
				muttongrass	10			
				other perennial forbs	10			
				prairie Junegrass	10			
				Nevada bluegrass	5			
				mountain snowberry	5			
				yellow rabbitbrush	5			
				basin wildrye	3			
183:								
Styers----------	Claypan	Favorable	800	alkali sagebrush	35		---	---
		Normal	500	western wheatgrass	15			
		Unfavorable	300	bluebunch wheatgrass	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				prairie Junegrass	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
183:								
Ironsprings-----	Sandyland	Favorable	1,200	antelope bitterbrush	20		---	---
		Normal	1,000	Wyoming big sagebrush	15			
		Unfavorable	600	needleandthread	15			
				Indian ricegrass	10			
				other perennial forbs	5			
				other perennial grasses	5			
				prairie Junegrass	5			
				western wheatgrass	5			
Maysprings------	Sandyland	Favorable	1,200	antelope bitterbrush	20		---	---
		Normal	1,000	Wyoming big sagebrush	15			
		Unfavorable	600	needleandthread	15			
				Indian ricegrass	10			
				bluebunch wheatgrass	5			
				other perennial forbs	5			
				other perennial grasses	5			
				prairie Junegrass	5			
				western wheatgrass	5			
184:								
Styers----------	Claypan	Favorable	800	alkali sagebrush	35		---	---
		Normal	500	western wheatgrass	15			
		Unfavorable	300	bluebunch wheatgrass	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				prairie Junegrass	5			
Pinelli---------	Clayey Foothills	Favorable	1,200	western wheatgrass	40		---	---
		Normal	900	Wyoming big sagebrush	5			
		Unfavorable	600	bottlebrush squirreltail	5			
				prairie Junegrass	5			
Taffom----------	Rolling Loam	Favorable	1,000	Wyoming big sagebrush	15		---	---
		Normal	800	needleandthread	15			
		Unfavorable	500	western wheatgrass	15			
				prairie Junegrass	10			
				Indian ricegrass	5			
				Nevada bluegrass	5			
				bluebunch wheatgrass	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
185:								
Taffom----------	Rolling Loam	Favorable	1,000	Wyoming big sagebrush	15		---	---
		Normal	800	needleandthread	15			
		Unfavorable	500	western wheatgrass	15			
				prairie Junegrass	10			
				Indian ricegrass	5			
				Nevada bluegrass	5			
				bluebunch wheatgrass	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
186:								
Talamantes------	Silty Swale	Favorable	1,000	Wyoming big sagebrush	15		---	---
		Normal	850	Gardner's saltbush	10			
		Unfavorable	700	Indian ricegrass	10			
				other shrubs	10			
				streambank wheatgrass	10			
				streambank wheatgrass	10			
				western wheatgrass	10			
				other perennial forbs	5			
187:								
Talamantes------	Loamy	Favorable	625	Wyoming big sagebrush	15		---	---
		Normal	500	Indian ricegrass	10			
		Unfavorable	375	needleandthread	10			
				streambank wheatgrass	10			
				other perennial forbs	5			
				shadscale saltbush	5			
				streambank wheatgrass	5			
				western wheatgrass	5			
188:								
Talamantes------	Alkali Upland	Favorable	600	Gardner's saltbush	30		---	---
		Normal	400	streambank wheatgrass	10			
		Unfavorable	350	streambank wheatgrass	10			
				western wheatgrass	10			
				Indian ricegrass	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
189:								
Tipper----------	Semidesert Juniper	Favorable	---	big sagebrush		15	Utah juniper	60
		Normal	---	needleandthread		15	twoneedle pinyon	60
		Unfavorable	---	Indian ricegrass		10		
				other perennial forbs		5		
				other perennial grasses		5		
				spiny hopsage		5		
Crustown--------	Semidesert Juniper	Favorable	---	Utah juniper		15	Utah juniper	35
		Normal	---	Wyoming big sagebrush		15		
		Unfavorable	---	needleandthread		15		
				Indian ricegrass		10		
				spiny hopsage		5		
190:								
Tipperary-------	Sandy Cold Desert	Favorable	---	Wyoming big sagebrush		10	twoneedle pinyon	70
		Normal	---	needleandthread		10	Utah juniper	---
		Unfavorable	---	spiny hopsage		10		
				Indian ricegrass		5		
				Nevada bluegrass		5		
				bottlebrush squirreltail		5		
				plains pricklypear		5		
191:								
Tipperary-------	Sandy Cold Desert	Favorable	725	needleandthread	20		---	---
		Normal	650	spiny hopsage	15			
		Unfavorable	525	Indian ricegrass	10			
				shadscale saltbush	10			
				Nevada bluegrass	5			
				Wyoming big sagebrush	5			
				bottlebrush squirreltail	5			
				plains pricklypear	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
192:								
Tipperary-------	Limy Cold Desert	Favorable	725	winterfat	30		---	---
		Normal	650	Indian ricegrass	10			
		Unfavorable	525	needleandthread	10			
				shadscale saltbush	10			
				streambank wheatgrass	10			
				Wyoming big sagebrush	5			
				bottlebrush squirreltail	5			
Willwood--------	Limy Cold Desert	Favorable	725	winterfat	35		---	---
		Normal	650	other shrubs	15			
		Unfavorable	525	Indian ricegrass	10			
				bottlebrush squirreltail	5			
				needleandthread	5			
				other perennial forbs	5			
				other perennial grasses	5			
193:								
Tisworth--------	Alkaline Slopes	Favorable	800	Wyoming big sagebrush	15		---	---
		Normal	650	streambank wheatgrass	15			
		Unfavorable	400	greasewood	10			
				Nevada bluegrass	5			
				bluebunch wheatgrass	5			
				muttongrass	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
194:								
Tolman----------	Loamy Breaks	Favorable	800	Wyoming big sagebrush	15		---	---
		Normal	500	western wheatgrass	15			
		Unfavorable	400	antelope bitterbrush	10			
				true mountain mahogany	10			
				Indian ricegrass	5			
				Nevada bluegrass	5			
				bluebunch wheatgrass	5			
				needleandthread	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
Duffymont-------	Loamy Breaks	Favorable	800	mountain big sagebrush	15		---	---
		Normal	500	western wheatgrass	15			
		Unfavorable	400	antelope bitterbrush	10			
				true mountain mahogany	10			
				Indian ricegrass	5			
				Nevada bluegrass	5			
				Saskatoon serviceberry	5			
				bluebunch wheatgrass	5			
				needleandthread	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
195:								
Torriorthents---	---	Favorable	350	Wyoming big sagebrush	15		---	---
		Normal	275	Indian ricegrass	10			
		Unfavorable	175	bottlebrush squirreltail	10			
				saltbush	10			
				needleandthread	5			
				shadscale	5			
				bud sagebrush				
				western wheatgrass				
196:								
Torriorthents---	---	Favorable	350	Wyoming big sagebrush	15		---	---
		Normal	275	Indian ricegrass	10			
		Unfavorable	175	bottlebrush squirreltail	10			
				saltbush	10			
				needleandthread	5			
				shadscale	5			
				bud sagebrush				
				western wheatgrass				
Baston----------	Shale	Favorable	450	Gardner's saltbush	35		---	---
		Normal	350	bottlebrush squirreltail	10			
		Unfavorable	200	western wheatgrass	10			
				Indian ricegrass	5			
				Nevada bluegrass	5			
				THICKSPIKE WHEATGRASS	5			
				bud sagebrush	5			
				shadscale	5			
				streambank wheatgrass	5			
197:								
Torriorthents---	---	Favorable	1,000	Indian ricegrass	10		---	---
		Normal	750	Wyoming big sagebrush	10			
		Unfavorable	500	bluebunch wheatgrass	10			
				western wheatgrass	10			
				antelope bitterbrush	5			
				needleandthread	5			
				true mountainmahogany	5			
Rock outcrop----	---	Favorable	---				---	---
		Normal	---					
		Unfavorable	---					
198:								
Torriorthents---	---	Favorable	300	Wyoming big sagebrush	15		---	---
		Normal	250	Indian ricegrass	10			
		Unfavorable	175	bottlebrush squirreltail	10			
				saltbush	10			
				needleandthread	5			
				shadscale	5			
				bud sagebrush				
				western wheatgrass				
Rock outcrop----	---	Favorable	---				---	---
		Normal	---					
		Unfavorable	---					
199:								
Torriorthents---	---	Favorable	600	Indian ricegrass	15		---	---
		Normal	400	sagebrush	15			
		Unfavorable	200	wheatgrass	15			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
199:								
Torripsamments--	---	Favorable	800	Indian ricegrass	15		---	---
		Normal	500	needleandthread	15			
		Unfavorable	300	wheatgrass	15			
				other shrubs	10			
				sagebrush	10			
				threadleaf sedge	10			
				Nevada bluegrass	5			
200:								
Tresano---------	Loamy 7-10" PPT	Favorable	625	Wyoming big sagebrush	15		---	---
		Normal	500	shadscale saltbush	10			
		Unfavorable	375	streambank wheatgrass	10			
				Indian ricegrass	5			
				Nevada bluegrass	5			
				needleandthread	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				streambank wheatgrass	5			
				western wheatgrass	5			
201:								
Tresano---------	Clayey 9-11" PPT	Favorable	625	streambank wheatgrass	15		---	---
		Normal	550	western wheatgrass	15			
		Unfavorable	475	streambank wheatgrass	10			
				Indian ricegrass	5			
				Nevada bluegrass	5			
				Wyoming big sagebrush	5			
				needleandthread	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				shadscale saltbush	5			
Hiatha----------	Alkali Upland	Favorable	600	Gardner's saltbush	30		---	---
		Normal	400	Indian ricegrass	10			
		Unfavorable	350	streambank wheatgrass	10			
				streambank wheatgrass	10			
				western wheatgrass	10			
				bottlebrush squirreltail	5			
Kandaly---------	Dry Sandy	Favorable	650	needleandthread	20		---	---
		Normal	550	Indian ricegrass	10			
		Unfavorable	300	black sagebrush	10			
				streambank wheatgrass	10			
				threadleaf sedge	10			
				fourwing saltbush	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				winterfat	5			
202:								
Turzo-----------	Clayey Saltdesert	Favorable	500	Gardner's saltbush	10		---	---
		Normal	350	Indian ricegrass	10			
		Unfavorable	200	bottlebrush squirreltail	10			
				galleta	10			
				western wheatgrass	10			
				bud sagebrush	5			
				saline wildrye	5			
				shadscale saltbush	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
203:								
Turzo----------	Alkaline Slopes	Favorable	700	big sagebrush	15		---	---
		Normal	550	bottlebrush squirreltail	10			
		Unfavorable	400	galleta	10			
				greasewood	10			
				shadscale saltbush	10			
				Gardner's saltbush	5			
				bud sagebrush	5			
				western wheatgrass	5			
204:								
Typic Natrargids-----	---	Favorable	600	Wyoming big sagebrush	15		---	---
		Normal	---	black greasewood	10			
		Unfavorable	300	galleta	10			
				Gardner's saltbush	5			
				bottlebrush squirreltail	5			
				bud sagebrush	5			
				inland saltgrass	5			
				shadscale	5			
				western wheatgrass	5			
205:								
Uffens----------	Alkaline Slopes	Favorable	700	Wyoming big sagebrush	15		---	---
		Normal	550	greasewood	10			
		Unfavorable	400	shadscale saltbush	10			
				winterfat	10			
				Indian ricegrass	5			
				bottlebrush squirreltail	5			
				bud sagebrush	5			
				galleta	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				western wheatgrass	5			
206:								
Ustorthents-----	---	Favorable	900	wheatgrass	20		---	---
		Normal	700	Indian ricegrass	10			
		Unfavorable	500	sagebrush	10			
				antelope bitterbrush	5			
				bluegrass	5			
				needleandthread	5			
				serviceberry	5			
				true mountainmahogany	5			
Borolls---------	---	Favorable	2,500	Columbia needlegrass	10		---	---
		Normal	1,800	Gambel's oak	10			
		Unfavorable	1,200	Saskatoon serviceberry	10			
				elk sedge	10			
				letterman needlegrass	10			
				mountain big sagebrush	10			
				mountain brome	10			
				mountain snowberry	10			
				slender wheatgrass	10			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
207:								
Vermillion------	Loamy 7-10" PPT	Favorable	725	Wyoming big sagebrush	15		---	---
		Normal	575	streambank wheatgrass	12			
		Unfavorable	300	streambank wheatgrass	12			
				Indian ricegrass	10			
				bottlebrush squirreltail	10			
				shadscale saltbush	10			
				Nevada bluegrass	5			
				needleandthread	5			
				western wheatgrass	5			
Langspring------	Loamy 7-10" PPT	Favorable	725	Wyoming big sagebrush	15		---	---
		Normal	575	streambank wheatgrass	15			
		Unfavorable	300	Indian ricegrass	10			
				bottlebrush squirreltail	10			
				shadscale saltbush	10			
				streambank wheatgrass	10			
				needleandthread	5			
				western wheatgrass	5			
208:								
Wallson---------	Semidesert Sandy Loam	Favorable	850	needleandthread	30		---	---
		Normal	700	Wyoming big sagebrush	20			
		Unfavorable	500	other shrubs	10			
				Indian ricegrass	5			
				bottlebrush squirreltail	5			
				other perennial forbs	5			
				other perennial grasses	5			
				saline wildrye	5			
				sand dropseed	5			
				streambank wheatgrass	5			
Tricera---------	Semidesert Sandy Loam	Favorable	850	needleandthread	20		---	---
		Normal	700	Wyoming big sagebrush	15			
		Unfavorable	500	Indian ricegrass	10			
				sand dropseed	10			
				bottlebrush squirreltail	5			
				streambank wheatgrass	5			
				wormwood	5			
209:								
Weed------------	Deep Loam	Favorable	1,800	Wyoming big sagebrush	15		---	---
		Normal	1,500	needleandthread	15			
		Unfavorable	900	western wheatgrass	15			
				other perennial grasses	10			
				prairie Junegrass	10			
				Indian ricegrass	5			
				bottlebrush squirreltail	5			
				common snowberry	5			
				muttongrass	5			
				other perennial forbs	5			
				other shrubs	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
210:								
Willwood--------	Sandy Cold Desert	Favorable	725	needleandthread	25		---	---
		Normal	650	Indian ricegrass	10			
		Unfavorable	525	other perennial grasses	10			
				shadscale saltbush	10			
				spiny hopsage	10			
				Wyoming big sagebrush	5			
				bottlebrush squirreltail	5			
				other shrubs	5			
				sand dropseed	3			
				Nevada bluegrass	2			
Sheppard--------	Sandy Cold Desert	Favorable	725	needleandthread	25		---	---
		Normal	650	Indian ricegrass	10			
		Unfavorable	525	bottlebrush squirreltail	10			
				shadscale saltbush	10			
				Wyoming big sagebrush	5			
				sand dropseed	5			
				spiny hopsage	5			
211:								
Willwood--------	Cold Desert Breaks	Favorable	600	needleandthread	20		---	---
		Normal	450	Wyoming big sagebrush	15			
		Unfavorable	350	Indian ricegrass	10			
				bottlebrush squirreltail	10			
				other perennial grasses	10			
				shadscale saltbush	10			
				other shrubs	5			
Tipperary-------	Cold Desert Breaks	Favorable	600	needleandthread	25		---	---
		Normal	450	Wyoming big sagebrush	15			
		Unfavorable	350	Indian ricegrass	10			
				bottlebrush squirreltail	10			
				shadscale saltbush	10			
				winterfat	5			
212:								
Willwood--------	Sandy Cold Desert	Favorable	725	needleandthread	25		---	---
		Normal	650	Indian ricegrass	10			
		Unfavorable	525	other perennial grasses	10			
				shadscale saltbush	10			
				spiny hopsage	10			
				Wyoming big sagebrush	5			
				bottlebrush squirreltail	5			
				other shrubs	5			
				sand dropseed	3			
				Nevada bluegrass	2			
Tipperary-------	Sandy Cold Desert	Favorable	725	needleandthread	25		---	---
		Normal	650	Indian ricegrass	10			
		Unfavorable	525	bottlebrush squirreltail	10			
				shadscale saltbush	10			
				Wyoming big sagebrush	5			
				sand dropseed	5			
				spiny hopsage	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
213:								
Winevada--------	Mountain Loam	Favorable	1,800	Saskatoon serviceberry	10		---	---
		Normal	1,500	mountain big sagebrush	10			
		Unfavorable	1,200	mountain brome	10			
				nodding brome	10			
				other perennial grasses	10			
				slender wheatgrass	10			
				Letterman's needlegrass	5			
				elk sedge	5			
				mountain snowberry	5			
				other perennial forbs	5			
				other shrubs	5			
Splitro---------	Mountain Loam	Favorable	1,800	other perennial grasses	15		---	---
		Normal	1,500	mountain big sagebrush	10			
		Unfavorable	1,200	nodding brome	10			
				slender wheatgrass	10			
				elk sedge	5			
				mountain brome	5			
				mountain snowberry	5			
				other perennial forbs	5			
214:								
Winevada--------	Brushy Loam	Favorable	3,000	Gambel's oak	10		---	---
		Normal	2,000	Saskatoon serviceberry	10			
		Unfavorable	1,500	elk sedge	10			
				mountain brome	10			
				Letterman's needlegrass	5			
				mountain snowberry	5			
				nodding brome	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				slender wheatgrass	5			
Splitro---------	Brushy Loam	Favorable	3,000	Gambel's oak	10		---	---
		Normal	2,000	Saskatoon serviceberry	10			
		Unfavorable	1,500	elk sedge	10			
				mountain brome	5			
				mountain snowberry	5			
				nodding brome	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				slender wheatgrass	5			
215:								
Winkleman-------	Cold Desert Overflow	Favorable	3,000	basin wildrye	20		---	---
		Normal	2,000	common reed	10			
		Unfavorable	1,000	fourwing saltbush	10			
				other perennial forbs	10			
				other shrubs	10			
				alkali sacaton	5			
				other perennial grasses	5			
				western wheatgrass	5			
216:								
Yamo------------	Clayey Foothills	Favorable	1,200	western wheatgrass	30		---	---
		Normal	900	Wyoming big sagebrush	15			
		Unfavorable	600	bluebunch wheatgrass	10			
				yellow rabbitbrush	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
217:								
Yamo----------	Clayey Foothills	Favorable	1,200	western wheatgrass	30		---	---
		Normal	900	Wyoming big sagebrush	15			
		Unfavorable	600	bluebunch wheatgrass	10			
				yellow rabbitbrush	5			
218:								
Yellowwash------	Loamy	Favorable	625	Wyoming big sagebrush	20		---	---
		Normal	500	Indian ricegrass	10			
		Unfavorable	375	needleandthread	10			
				streambank wheatgrass	10			
				Nevada bluegrass	5			
				bottlebrush squirreltail	5			
				shadscale saltbush	5			
				streambank wheatgrass	5			
				western wheatgrass	5			
Piezon----------	Rolling Loam	Favorable	1,000	western wheatgrass	20		---	---
		Normal	700	Wyoming big sagebrush	15			
		Unfavorable	500	needleandthread	10			
				Indian ricegrass	5			
				Nevada bluegrass	5			
				bottlebrush squirreltail	5			
				prairie Junegrass	5			
219:								
Youga-----------	Mountain Loam	Favorable	1,800	Letterman's needlegrass	15		---	---
		Normal	1,500	slender wheatgrass	15			
		Unfavorable	1,200	other shrubs	10			
				Saskatoon serviceberry	5			
				mountain big sagebrush	5			
				mountain brome	5			
				mountain snowberry	5			
				nodding brome	5			
				other perennial forbs	5			
				other perennial grasses	5			
220:								
Youga-----------	Mountain Loam	Favorable	1,800	Letterman's needlegrass	15		---	---
		Normal	1,500	slender wheatgrass	15			
		Unfavorable	1,200	mountain big sagebrush	10			
				elk sedge	5			
				mountain brome	5			
				mountain snowberry	5			
				nodding brome	5			
				prairie Junegrass	5			
Dinnen----------	Mountain Loam	Favorable	1,800	Letterman's needlegrass	15		---	---
		Normal	1,500	slender wheatgrass	15			
		Unfavorable	1,200	mountain big sagebrush	10			
				elk sedge	5			
				mountain brome	5			
				mountain snowberry	5			
				nodding brome	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
221:								
Youga----------	Stony Loam	Favorable	2,000	bluebunch wheatgrass	20		---	---
		Normal	1,200	Saskatoon serviceberry	10			
		Unfavorable	1,000	antelope bitterbrush	10			
				Letterman's needlegrass	5			
				mountain big sagebrush	5			
				muttongrass	5			
				needleandthread	5			
				western wheatgrass	5			
Gelkie----------	Dry Mountain Loam	Favorable	1,000	bluebunch wheatgrass	20		---	---
		Normal	750	Wyoming big sagebrush	15			
		Unfavorable	500	Letterman's needlegrass	5			
				Nevada bluegrass	5			
				antelope bitterbrush	5			
				bottlebrush squirreltail	5			
				mountain snowberry	5			
				muttongrass	5			
				needleandthread	5			
				sheep fescue	5			
Clayburn--------	Mountain Loam	Favorable	1,800	mountain big sagebrush	15		---	---
		Normal	1,500	slender wheatgrass	10			
		Unfavorable	1,200	western wheatgrass	10			
				Letterman's needlegrass	5			
				Saskatoon serviceberry	5			
				mountain brome	5			
				mountain snowberry	5			
				needleandthread	5			
222:								
Youngston-------	Cold Desert Overflow	Favorable	3,000	basin wildrye	20		---	---
		Normal	2,000	common reed	10			
		Unfavorable	1,000	fourwing saltbush	10			
				other perennial forbs	10			
				other shrubs	10			
				alkali sacaton	5			
				other perennial grasses	5			
				western wheatgrass	5			
223:								
Youngston-------	Foothill Swale	Favorable	2,500	basin wildrye	30		---	---
		Normal	1,800	basin big sagebrush	10			
		Unfavorable	1,000	streambank wheatgrass	10			
				western wheatgrass	10			
				winterfat	5			
224:								
Zillion---------	Mountain Loam	Favorable	1,800	mountain big sagebrush	10		---	---
		Normal	1,500	mountain snowberry	10			
		Unfavorable	1,200	western wheatgrass	10			
				Letterman's needlegrass	5			
				Utah serviceberry	5			
				prairie Junegrass	5			
				slender wheatgrass	5			
Barkelew--------	Dry Exposure	Favorable	500	bluebunch wheatgrass	15		---	---
		Normal	350	Indian ricegrass	10			
		Unfavorable	200	mountain big sagebrush	5			
				needleandthread	5			
				prairie sagewort	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
224:								
Grapit----------	Mountain Loam	Favorable	1,800	mountain snowberry	15		---	---
		Normal	1,500	Letterman's needlegrass	10			
		Unfavorable	1,200	bluebunch wheatgrass	10			
				mountain big sagebrush	10			
				slender wheatgrass	10			
				Saskatoon serviceberry	5			
225:								
Abracon---------	Semidesert Loam (Wyoming Big Sagebrush)	Favorable	900	Indian ricegrass	20		---	---
		Normal	700	Wyoming big sagebrush	20			
		Unfavorable	500	bottlebrush squirreltail	10			
				galleta	10			
				needleandthread	10			
				other perennial forbs	10			
				globemallow	5			
				other perennial grasses	5			
				other shrubs	5			
				winterfat	5			
Solirec---------	Semidesert Loam (Wyoming Big Sagebrush)	Favorable	900	Indian ricegrass	20		---	---
		Normal	700	Wyoming big sagebrush	20			
		Unfavorable	500	bottlebrush squirreltail	10			
				galleta	10			
				needleandthread	10			
				other perennial forbs	10			
				globemallow	5			
				other perennial grasses	5			
				other shrubs	5			
				winterfat	5			
226:								
Arches----------	Pinyon-Juniper	Favorable	350	black sagebrush		20	Utah juniper	---
		Normal	250	other shrubs		20	twoneedle pinyon	---
		Unfavorable	150	saline wildrye		20		
				Mormon tea		10		
				bluebunch wheatgrass		10		
				other perennial grasses		10		
				galleta		5		
				other perennial forbs		5		
Mespun----------	Semidesert Sand (Four-Wing Saltbush)	Favorable	700	Indian ricegrass	25		---	---
		Normal	500	other shrubs	15			
		Unfavorable	250	fourwing saltbush	10			
				needleandthread	10			
				other perennial grasses	10			
				sand sagebrush	10			
				crispleaf buckwheat	5			
				galleta	5			
				other perennial forbs	5			
				scarlet globemallow	5			
Rock outcrop----	---	Favorable	---				---	---
		Normal	---					
		Unfavorable	---					

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
227:								
Bankard family--	Loamy Bottom (Basin Big Sagebrush)	Favorable	2,400	basin big sagebrush	15		---	---
		Normal	1,600	basin wildrye	15			
		Unfavorable	900	other shrubs	15			
				Indian ricegrass	10			
				alkali sacaton	10			
				needleandthread	10			
				other perennial forbs	10			
				other perennial grasses	10			
				western wheatgrass	5			
Cameo----------	Loamy Bottom (Basin Big Sagebrush)	Favorable	2,500	basin big sagebrush	15		---	---
		Normal	1,600	basin wildrye	15			
		Unfavorable	900	Indian ricegrass	10			
				alkali sacaton	10			
				needleandthread	10			
				other perennial forbs	10			
				other perennial grasses	10			
				other shrubs	10			
				fourwing saltbush	5			
				galleta	5			
228:								
Bondman---------	Pinyon-Juniper	Favorable	525	Utah juniper		20	Utah juniper	---
		Normal	425	Indian ricegrass		10	twoneedle pinyon	---
		Unfavorable	300	Wyoming big sagebrush		10		
				galleta		10		
				black sagebrush		5		
				bluebunch wheatgrass		5		
				needleandthread		5		
				other perennial forbs		5		
				other perennial grasses		5		
				plains pricklypear		5		
				scarlet globemallow		5		
				twoneedle pinyon		5		
				broom snakeweed		3		
Rock outcrop----	---	Favorable	---				---	---
		Normal	---					
		Unfavorable	---					
229:								
Cameo----------	Loamy Bottom (Basin Big Sagebrush)	Favorable	2,500	basin big sagebrush	15		---	---
		Normal	1,600	basin wildrye	15			
		Unfavorable	900	Indian ricegrass	10			
				alkali sacaton	10			
				needleandthread	10			
				other perennial forbs	10			
				other perennial grasses	10			
				other shrubs	10			
				fourwing saltbush	5			
				galleta	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
230:								
Cragnot---------	Pinyon-Juniper	Favorable	800	twoneedle pinyon		20	Utah juniper	---
		Normal	550	Indian ricegrass		10	twoneedle pinyon	---
		Unfavorable	300	Utah juniper		10		
				bluebunch wheatgrass		10		
				other perennial forbs		10		
				Nevada bluegrass		5		
				Wyoming big sagebrush		5		
				black sagebrush		5		
				needleandthread		5		
				other shrubs		5		
				stemless goldenweed		5		
				true mountain mahogany		5		
				antelope bitterbrush		3		
				Mormon tea		2		
Pensore---------	Pinyon-Juniper	Favorable	800	twoneedle pinyon		20	Utah juniper	---
		Normal	550	Indian ricegrass		10	twoneedle pinyon	---
		Unfavorable	300	Utah juniper		10		
				bluebunch wheatgrass		10		
				other perennial forbs		10		
				Nevada bluegrass		5		
				Wyoming big sagebrush		5		
				black sagebrush		5		
				needleandthread		5		
				prairie Junegrass		5		
				stemless goldenweed		5		
				true mountain mahogany		5		
				antelope bitterbrush		3		
				Mormon tea		2		
Grapit----------	Pinyon-Juniper	Favorable	800	twoneedle pinyon		20	Utah juniper	---
		Normal	550	Wyoming big sagebrush		15	twoneedle pinyon	---
		Unfavorable	300	bluebunch wheatgrass		15		
				Indian ricegrass		10		
				western wheatgrass		10		
				Nevada bluegrass		5		
				other perennial grasses		5		
				prairie Junegrass		5		
				true mountain mahogany		5		
231:								
Green River-----	River Floodplain (Fremont Cottonwood)	Favorable	1,600	bluegrass	15		---	---
		Normal	1,400	sandbar willow	15			
		Unfavorable	1,200	wheatgrass	15			
				basin big sagebrush	10			
				other perennial forbs	10			
				rubber rabbitbrush	10			
				Fremont's cottonwood	5			
				alkali sacaton	5			
				inland saltgrass	5			
				other perennial grasses	5			
				other shrubs	5			
Fluvaquents-----	---	Favorable	3,000	cattail	15		---	---
		Normal	2,000	rush	15			
		Unfavorable	1,000	sedge	15			
				willow	15			
				common reed	10			
				other perennial forbs	10			
				other perennial grasses	10			
				reed canarygrass	10			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
232:								
Lakebench-------	Rolling Loam	Favorable	900	Wyoming big sagebrush	15		---	---
		Normal	700	needleandthread	15			
		Unfavorable	500	western wheatgrass	15			
				bottlebrush squirreltail	10			
				other perennial forbs	10			
				other shrubs	10			
				Indian ricegrass	5			
				Sandberg bluegrass	5			
				bluebunch wheatgrass	5			
				other perennial grasses	5			
				scarlet globemallow	5			
Strell----------	Pinyon-Juniper	Favorable	525	Utah juniper		20	Utah juniper	---
		Normal	425	Indian ricegrass		10	twoneedle pinyon	---
		Unfavorable	300	Wyoming big sagebrush		10		
				bluebunch wheatgrass		5		
				bottlebrush squirreltail		5		
				broom snakeweed		5		
				needleandthread		5		
				other perennial forbs		5		
				other perennial grasses		5		
				prairie Junegrass		5		
				scarlet globemallow		5		
				twoneedle pinyon		5		
				western wheatgrass		5		
233:								
Lakebench-------	Rolling Loam	Favorable	900	Wyoming big sagebrush	15		---	---
		Normal	700	needleandthread	15			
		Unfavorable	500	western wheatgrass	15			
				bottlebrush squirreltail	10			
				other perennial forbs	10			
				other shrubs	10			
				Indian ricegrass	5			
				Sandberg bluegrass	5			
				bluebunch wheatgrass	5			
				other perennial grasses	5			
				scarlet globemallow	5			
Yampa-----------	Pinyon-Juniper	Favorable	525	Utah juniper		15	Utah juniper	---
		Normal	400	bluebunch wheatgrass		15	twoneedle pinyon	---
		Unfavorable	300	Indian ricegrass		10		
				Wyoming big sagebrush		10		
				other perennial forbs		10		
				other shrubs		10		
				black sagebrush		5		
				needleandthread		5		
				prairie Junegrass		5		
				twoneedle pinyon		5		
				western wheatgrass		5		

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Rangeland	Forest		
			Lb/acre		Pct.	Pct.		
234:								
Mantlemine------	Rolling Loam	Favorable	900	Wyoming big sagebrush	15		---	---
		Normal	750	needleandthread	15			
		Unfavorable	600	western wheatgrass	15			
				Sandberg bluegrass	10			
				bluebunch wheatgrass	10			
				Indian ricegrass	5			
				bottlebrush squirreltail	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				prairie Junegrass	5			
				scarlet globemallow	5			
235:								
Mantlemine------	Rolling Loam	Favorable	900	Wyoming big sagebrush	15		---	---
		Normal	750	needleandthread	15			
		Unfavorable	600	western wheatgrass	15			
				Sandberg bluegrass	10			
				bluebunch wheatgrass	10			
				Indian ricegrass	5			
				bottlebrush squirreltail	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				prairie Junegrass	5			
				scarlet globemallow	5			
Emlin-----------	Mountain Loam (Mountain Big Sagebrush)	Favorable	1,800	mountain big sagebrush	15		---	---
		Normal	1,500	needleandthread	15			
		Unfavorable	900	other perennial forbs	15			
				western wheatgrass	15			
				Nevada bluegrass	5			
				Sandberg bluegrass	5			
				Utah serviceberry	5			
				bottlebrush squirreltail	5			
				mountain snowberry	5			
				prairie Junegrass	5			
				scarlet globemallow	5			
				yellow rabbitbrush	5			
236:								
Mido------------	Semidesert Sandy Loam	Favorable	800	needleandthread	20		---	---
		Normal	600	other perennial grasses	15			
		Unfavorable	400	Indian ricegrass	10			
				fourwing saltbush	10			
				galleta	10			
				other shrubs	10			
				Wyoming big sagebrush	5			
				bottlebrush squirreltail	5			
				scarlet globemallow	5			
				shadscale saltbush	5			
				winterfat	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
237:								
Mikim----------	Semidesert Loam (Wyoming Big Sagebrush)	Favorable	900	Indian ricegrass	20		---	---
		Normal	700	Wyoming big sagebrush	20			
		Unfavorable	500	bottlebrush squirreltail	10			
				galleta	10			
				needleandthread	10			
				other perennial forbs	10			
				other perennial grasses	5			
				other shrubs	5			
				scarlet globemallow	5			
				winterfat	5			
Mikim----------	Alkali Flat (Black Greasewood)	Favorable	1,000	greasewood	30		---	---
		Normal	700	other shrubs	15			
		Unfavorable	500	alkali sacaton	10			
				bottlebrush squirreltail	10			
				shadscale saltbush	10			
				Indian ricegrass	5			
				galleta	5			
				other perennial forbs	5			
				other perennial grasses	5			
				seepweed	5			
238:								
Milok----------	Semidesert Sandy Loam (Four-Wing Saltbush)	Favorable	800	Indian ricegrass	20		---	---
		Normal	650	needleandthread	15			
		Unfavorable	450	other perennial grasses	15			
				other shrubs	15			
				fourwing saltbush	10			
				galleta	10			
				other perennial forbs	10			
				Wyoming big sagebrush	5			
239:								
Milok----------	Pinyon-Juniper	Favorable	525	Utah juniper		30	Utah juniper	---
		Normal	400	other shrubs		15	twoneedle pinyon	---
		Unfavorable	300	Indian ricegrass		10		
				galleta		10		
				other perennial forbs		10		
				other perennial grasses		10		
				Wyoming big sagebrush		5		
				needleandthread		5		
				twoneedle pinyon		5		
Solirec----------	Semidesert Sandy Loam	Favorable	800	Indian ricegrass	15		---	---
		Normal	600	needleandthread	15			
		Unfavorable	400	Wyoming big sagebrush	10			
				fourwing saltbush	10			
				galleta	10			
				other perennial forbs	10			
				other perennial grasses	10			
				scarlet globemallow	5			
				shadscale saltbush	5			
				western wheatgrass	5			
				winterfat	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
239:								
Strych----------	Pinyon-Juniper	Favorable	500	Utah juniper		20	Utah juniper	---
		Normal	400	Indian ricegrass		10	twoneedle pinyon	---
		Unfavorable	250	galleta		10		
				other perennial forbs		10		
				other perennial grasses		10		
				Mormon tea		5		
				Nevada bluegrass		5		
				Wyoming big sagebrush		5		
				black sagebrush		5		
				bluebunch wheatgrass		5		
				needleandthread		5		
				true mountain mahogany		5		
				winterfat		5		
240:								
Milok-----------	Semidesert Sandy Loam (Four-Wing Saltbush)	Favorable	800	Indian ricegrass	20		---	---
		Normal	650	needleandthread	15			
		Unfavorable	450	other perennial grasses	15			
				other shrubs	15			
				fourwing saltbush	10			
				galleta	10			
				other perennial forbs	10			
				Wyoming big sagebrush	5			
Strych----------	Semidesert Gravelly Sandy Loam (Wyoming Big Sagebrush)	Favorable	600	Wyoming big sagebrush	30		---	---
		Normal	400	other perennial forbs	10			
		Unfavorable	250	other shrubs	10			
				rubber rabbitbrush	10			
				spiny hopsage	10			
				Indian ricegrass	5			
				bluegrass	5			
				bottlebrush squirreltail	5			
				horsebrush	5			
				other perennial grasses	5			
				shadscale saltbush	5			
241:								
Pensore---------	Pinyon-Juniper	Favorable	800	twoneedle pinyon		20	Utah juniper	---
		Normal	550	Indian ricegrass		10	twoneedle pinyon	---
		Unfavorable	300	Utah juniper		10		
				bluebunch wheatgrass		10		
				other perennial forbs		10		
				Nevada bluegrass		5		
				Wyoming big sagebrush		5		
				black sagebrush		5		
				needleandthread		5		
				prairie Junegrass		5		
				stemless goldenweed		5		
				true mountain mahogany		5		
				antelope bitterbrush		3		
				Mormon tea		2		

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
241:								
Roto----------	Pinyon-Juniper	Favorable	800	twoneedle pinyon		20	Utah juniper	---
		Normal	500	Indian ricegrass		10	twoneedle pinyon	---
		Unfavorable	300	bluebunch wheatgrass		10		
				other perennial forbs		10		
				Utah juniper		5		
				Wyoming big sagebrush		5		
				broom snakeweed		5		
				needleandthread		5		
				other perennial grasses		5		
				prairie Junegrass		5		
				stemless goldenweed		5		
				black sagebrush		3		
				western wheatgrass		2		
242:								
Riverwash-------	---	Favorable	---				---	---
		Normal	---					
		Unfavorable	---					
243:								
Rizno----------	Pinyon-Juniper	Favorable	400	Utah juniper		20	Utah juniper	---
		Normal	300	Indian ricegrass		10	twoneedle pinyon	---
		Unfavorable	150	Wyoming big sagebrush		10		
				galleta		10		
				bluebunch wheatgrass		5		
				broom snakeweed		5		
				needleandthread		5		
				other perennial forbs		5		
				other perennial grasses		5		
				prairie Junegrass		5		
				shadscale saltbush		5		
				western wheatgrass		5		
Windcomb--------	Pinyon-Juniper	Favorable	350	black sagebrush		20	Utah juniper	---
		Normal	250	other shrubs		20	twoneedle pinyon	---
		Unfavorable	150	saline wildrye		20		
				Mormon tea		10		
				bluebunch wheatgrass		10		
				other perennial grasses		10		
				galleta		5		
				other perennial forbs		5		
Anasazi---------	Pinyon-Juniper	Favorable	525	Indian ricegrass		15	Utah juniper	---
		Normal	400	Utah juniper		15	twoneedle pinyon	---
		Unfavorable	250	Wyoming big sagebrush		10		
				galleta		10		
				needleandthread		10		
				bluebunch wheatgrass		5		
				broom snakeweed		5		
				other perennial forbs		5		
				other perennial grasses		5		
				prairie Junegrass		5		
				shadscale saltbush		5		
				western wheatgrass		5		
244:								
Rock outcrop----	Pinyon-Juniper	Favorable	---				---	---
		Normal	---					
		Unfavorable	---					

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
244:								
Hackling--------	---	Favorable	800	twoneedle pinyon		20	Utah juniper	---
		Normal	550	Wyoming big sagebrush		10	twoneedle pinyon	---
		Unfavorable	300	bluebunch wheatgrass		10		
				Indian ricegrass		5		
				Utah juniper		5		
				antelope bitterbrush		5		
				bottlebrush squirreltail		5		
				broom snakeweed		5		
				needleandthread		5		
				other perennial forbs		5		
				other perennial grasses		5		
				prairie Junegrass		5		
				sand dropseed		5		
				true mountain mahogany		5		
245:								
Rock outcrop----	---	Favorable	---				---	---
		Normal	---					
		Unfavorable	---					
Torriorthents---	---	Favorable	800	Indian ricegrass	10		---	---
		Normal	400	Mormon tea	10			
		Unfavorable	100	Utah juniper	10			
				bluebunch wheatgrass	10			
				other perennial forbs	10			
				other shrubs	10			
				Wyoming big sagebrush	5			
				antelope bitterbrush	5			
				needleandthread	5			
				other perennial grasses	5			
				true mountain mahogany	5			
				twoneedle pinyon	5			
				western wheatgrass	5			
Ustorthents-----	---	Favorable	1,200	Indian ricegrass	10		---	---
		Normal	950	bluebunch wheatgrass	10			
		Unfavorable	750	mountain big sagebrush	10			
				other perennial forbs	10			
				Idaho fescue	5			
				Nevada bluegrass	5			
				Utah serviceberry	5			
				Wyoming big sagebrush	5			
				mountain snowberry	5			
				needleandthread	5			
				other perennial grasses	5			
				prairie Junegrass	5			
				true mountain mahogany	5			
246:								
Schoonover------	Mountain Windswept Ridge (Black Sagebrush)	Favorable	550	bluebunch wheatgrass	25		---	---
		Normal	400	black sagebrush	15			
		Unfavorable	250	other perennial forbs	10			
				prairie Junegrass	10			
				Indian ricegrass	5			
				Sandberg bluegrass	5			
				bottlebrush squirreltail	5			
				needleandthread	5			
				other shrubs	5			
				prairie sagewort	5			
				stemless goldenweed	5			
				western wheatgrass	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
247:								
Duffymont-------	Mountain Shallow Loam (Mountain Big Sagebrush)	Favorable	1250	bluebunch wheatgrass	20		---	---
		Normal	1,000	mountain big sagebrush	20			
		Unfavorable	750	antelope bitterbrush	10			
				needleandthread	10			
				Indian ricegrass	5			
				Nevada bluegrass	5			
				Utah serviceberry	5			
				arrowleaf balsamroot	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				sheep fescue	5			
247:								
Stout-----------	Pinyon-Juniper	Favorable	800	twoneedle pinyon		15	Utah juniper	---
		Normal	550	other perennial forbs		10	twoneedle pinyon	---
		Unfavorable	300	other perennial grasses		10		
				Indian ricegrass		5		
				Nevada bluegrass		5		
				Utah juniper		5		
				Wyoming big sagebrush		5		
				antelope bitterbrush		5		
				black sagebrush		5		
				bluebunch wheatgrass		5		
				bottlebrush squirreltail		5		
				curlleaf mountain mahogany		5		
				needleandthread		5		
				prairie Junegrass		5		
Rock outcrop----	---	Favorable	---				---	---
		Normal	---					
		Unfavorable	---					
248:								
Strych----------	Pinyon-Juniper	Favorable	500	Utah juniper		20	Utah juniper	---
		Normal	400	Indian ricegrass		10	twoneedle pinyon	---
		Unfavorable	250	galleta		10		
				other perennial forbs		10		
				other perennial grasses		10		
				Mormon tea		5		
				Nevada bluegrass		5		
				Wyoming big sagebrush		5		
				black sagebrush		5		
				bluebunch wheatgrass		5		
				needleandthread		5		
				true mountain mahogany		5		
				winterfat		5		
Mellenthin------	Pinyon-Juniper	Favorable	525	Utah juniper		20	Utah juniper	---
		Normal	400	Indian ricegrass		10	twoneedle pinyon	---
		Unfavorable	250	Wyoming big sagebrush		10		
				galleta		10		
				bluebunch wheatgrass		5		
				broom snakeweed		5		
				needleandthread		5		
				other perennial forbs		5		
				other perennial grasses		5		
				plains pricklypear		5		
				prairie Junegrass		5		
				twoneedle pinyon		5		
				western wheatgrass		5		

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
249:								
Zillion---------	Mountain Stony Loam (Browse)	Favorable	1,800	mountain big sagebrush	15		---	---
		Normal	1,500	other perennial grasses	15			
		Unfavorable	1,200	mountain snowberry	10			
				other perennial forbs	10			
				other shrubs	10			
				western wheatgrass	10			
				Columbia needlegrass	5			
				Letterman's needlegrass	5			
				Utah serviceberry	5			
				arrowleaf balsamroot	5			
				prairie Junegrass	5			
				slender wheatgrass	5			
Yampa-----------	Mountain Windswept Ridge (Black Sagebrush)	Favorable	500	bluebunch wheatgrass	15		---	---
		Normal	350	Indian ricegrass	10			
		Unfavorable	200	Sandberg bluegrass	10			
				black sagebrush	10			
				needleandthread	5			
				prairie sagewort	5			
Clyl------------	Mountain Stony Loam (Browse)	Favorable	1,800	mountain snowberry	15		---	---
		Normal	1,500	Letterman's needlegrass	10			
		Unfavorable	1,200	bluebunch wheatgrass	10			
				mountain big sagebrush	10			
				slender wheatgrass	10			
				Columbia needlegrass	5			
				Utah serviceberry	5			
250:								
Abracon---------	Semidesert Loam (Wyoming Big Sagebrush)	Favorable	900	Indian ricegrass	20		---	---
		Normal	700	Wyoming big sagebrush	20			
		Unfavorable	500	bottlebrush squirreltail	10			
				galleta	10			
				needleandthread	10			
				other perennial forbs	10			
				globemallow	5			
				other perennial grasses	5			
				other shrubs	5			
				winterfat	5			
251:								
Badland---------	---	Favorable	---				---	---
		Normal	---					
		Unfavorable	---					
Renegade--------	Mountain Very Steep Stony Loam (Browse)	Favorable	1,400	Utah serviceberry	20		---	---
		Normal	1,100	birchleaf mountain mahogany	20			
		Unfavorable	700	bluebunch wheatgrass	15			
				Columbia needlegrass	5			
				arrowleaf balsamroot	5			
				bluegrass	5			
				needleandthread	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				snowberry	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
252:								
Bigtom----------	Mountain Stony Loam (Curlleaf Mountainmahogany)	Favorable	2,500	curlleaf mountain mahogany	35		---	---
		Normal	1,800	bluebunch wheatgrass	10			
		Unfavorable	1,300	mountain snowberry	10			
				other perennial forbs	10			
				other perennial grasses	10			
				other shrubs	10			
				Sandberg bluegrass	5			
				Utah serviceberry	5			
				common chokecherry	5			
Namlot----------	Mountain Shallow Sandy Loam (Ponderosa Pine)	Favorable	800	bluegrass		15	ponderosa pine	35
		Normal	600	elk sedge		10		
		Unfavorable	350	mountain big sagebrush		10		
				needleandthread		10		
				other perennial forbs		10		
				other perennial grasses		10		
				other shrubs		10		
				Indian ricegrass		5		
				Oregongrape		5		
				antelope bitterbrush		5		
				birchleaf mountain mahogany		5		
				mountain snowberry		5		
Dokie-----------	High Mountain Stony Loam (Douglas Fir)	Favorable	500	mountain snowberry		20	Rocky Mountain Douglas-fir	50
		Normal	200	Oregongrape		15		
		Unfavorable	100	boxleaf myrtle		10		
				elk sedge		10		
				other perennial grasses		10		
				other shrubs		10		
				Woods' rose		5		
				bluegrass		5		
				heartleaf arnica		5		
				other perennial forbs		5		
				quaking aspen		5		
				slender wheatgrass		5		
253:								
Clapper----------	Semidesert Gravelly Loam (Wyoming Big Sagebrush)	Favorable	600	Wyoming big sagebrush	30		---	---
		Normal	400	galleta	15			
		Unfavorable	300	Indian ricegrass	10			
				needleandthread	10			
				other shrubs	10			
				bud sagebrush	5			
				other perennial forbs	5			
				other perennial grasses	5			
				shadscale saltbush	5			
				winterfat	5			
254:								
Cliff-----------	Semidesert Sandy Loam (Fourwing Saltbush)	Favorable	800	Indian ricegrass	20		---	---
		Normal	650	needleandthread	15			
		Unfavorable	450	other perennial grasses	15			
				other shrubs	15			
				fourwing saltbush	10			
				galleta	10			
				other perennial forbs	10			
				Wyoming big sagebrush	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
255:								
Clyl----------	Mountain Stony Loam (Bitterbrush)	Favorable	1,700	antelope bitterbrush	20		---	---
		Normal	1,400	needleandthread	15			
		Unfavorable	1,000	bluebunch wheatgrass	10			
				Utah serviceberry	5			
				arrowleaf balsamroot	5			
				birchleaf mountain mahogany	5			
				bluegrass	5			
				tapertip hawksbeard	5			
Pinerid---------	Mountain Windswept Ridge (Black Sagebrush)	Favorable	700	bluebunch wheatgrass	25		---	---
		Normal	500	bluegrass	15			
		Unfavorable	300	other shrubs	15			
				black sagebrush	10			
				other perennial forbs	10			
				prairie Junegrass	10			
				needleandthread	5			
				other perennial grasses	5			
				prairie sagewort	5			
256:								
Cortyzack-------	Mountain Loam (Mountain Big Sagebrush)	Favorable	2,000	Columbia needlegrass	15		---	---
		Normal	1,500	mountain big sagebrush	15			
		Unfavorable	1,000	western wheatgrass	15			
				birchleaf mountain mahogany	10			
				bluegrass	10			
				Ross' sedge	5			
				arrowleaf balsamroot	5			
				needleandthread	5			
				other perennial forbs	5			
				other shrubs	5			
				prairie Junegrass	5			
				tapertip hawksbeard	5			
Diagulch--------	Mountain Loam (Mountain Big Sagebrush)	Favorable	2,000	Columbia needlegrass	15		---	---
		Normal	1,500	mountain big sagebrush	15			
		Unfavorable	1,000	western wheatgrass	15			
				birchleaf mountain mahogany	10			
				bluegrass	10			
				Ross' sedge	5			
				arrowleaf balsamroot	5			
				needleandthread	5			
				other perennial forbs	5			
				other shrubs	5			
				prairie Junegrass	5			
				tapertip hawksbeard	5			
257:								
Cortyzack-------	Mountain Loam (Mountain Big Sagebrush)	Favorable	2,000	Columbia needlegrass	15		---	---
		Normal	1,500	mountain big sagebrush	15			
		Unfavorable	1,000	western wheatgrass	15			
				birchleaf mountain mahogany	10			
				bluegrass	10			
				Ross' sedge	5			
				arrowleaf balsamroot	5			
				needleandthread	5			
				other perennial forbs	5			
				other shrubs	5			
				prairie Junegrass	5			
				tapertip hawksbeard	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
257:								
Duffymont-------	Mountain Shallow Loam (Mountain Big Sagebrush)	Favorable	1,200	bluebunch wheatgrass	20		---	---
		Normal	1,000	mountain big sagebrush	20			
		Unfavorable	700	antelope bitterbrush	10			
				needleandthread	10			
				Indian ricegrass	5			
				Nevada bluegrass	5			
				Utah serviceberry	5			
				arrowleaf balsamroot	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
				sheep fescue	5			
258:								
Cortyzack-------	Mountain Loam (Mountain Big Sagebrush)	Favorable	2,000	Columbia needlegrass	15		---	---
		Normal	1,500	mountain big sagebrush	15			
		Unfavorable	1,000	western wheatgrass	15			
				birchleaf mountain mahogany	10			
				bluegrass	10			
				Ross' sedge	5			
				arrowleaf balsamroot	5			
				needleandthread	5			
				other perennial forbs	5			
				other shrubs	5			
				prairie Junegrass	5			
				tapertip hawksbeard	5			
Flynncove-------	Mountain Stony Loam (Bitterbrush)	Favorable	1,700	antelope bitterbrush	20		---	---
		Normal	1,400	needleandthread	15			
		Unfavorable	1,000	bluebunch wheatgrass	10			
				mountain big sagebrush	10			
				other perennial forbs	10			
				other perennial grasses	10			
				Utah serviceberry	5			
				arrowleaf balsamroot	5			
				birchleaf mountain mahogany	5			
				bluegrass	5			
				other shrubs	5			
259:								
Denco-----------	Desert Clay (Shadscale)	Favorable	400	shadscale saltbush	30		---	---
		Normal	300	bottlebrush squirreltail	20			
		Unfavorable	180	bud sagebrush	10			
				saline wildrye	10			
				winterfat	10			
				Indian ricegrass	5			
				other perennial forbs	5			
				other perennial grasses	5			
				other shrubs	5			
Gerst-----------	Semidesert Shallow Loam (Utah Juniper-Pinyon)	Favorable	350	black sagebrush	20		Utah juniper	25
		Normal	250	other shrubs	20		twoneedle pinyon	25
		Unfavorable	150	saline wildrye	20			
				Mormon tea	10			
				bluebunch wheatgrass	10			
				other perennial grasses	10			
				galleta	5			
				other perennial forbs	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
260:								
Dokie----------	High Mountain Stony Loam (Douglas Fir)	Favorable	500	mountain snowberry		20	Rocky Mountain Douglas-fir	50
		Normal	200	Oregongrape		15		
		Unfavorable	100	boxleaf myrtle		10		
				elk sedge		10		
				other perennial grasses		10		
				other shrubs		10		
				Woods' rose		5		
				bluegrass		5		
				heartleaf arnica		5		
				other perennial forbs		5		
				quaking aspen		5		
				slender wheatgrass		5		
Flynncove-------	Mountain Stony Loam (Browse)	Favorable	2,600	Utah serviceberry	20		---	---
		Normal	1,900	birchleaf mountain mahogany	20			
		Unfavorable	1,400	bluebunch wheatgrass	10			
				other perennial forbs	10			
				other perennial grasses	10			
				other shrubs	10			
				bluegrass	5			
				mountain big sagebrush	5			
				mountain snowberry	5			
				sedge	5			
261:								
Dokie----------	High Mountain Very Steep Stony Loam (Douglas Fir)	Favorable	400	mountain snowberry		15	Rocky Mountain Douglas-fir	35
		Normal	100	birchleaf mountain mahogany		10		
		Unfavorable	50	elk sedge		10		
				other perennial forbs		10		
				other perennial grasses		10		
				other shrubs		10		
				Oregongrape		5		
				Woods' rose		5		
				bluegrass		5		
				boxleaf myrtle		5		
				currant		5		
				heartleaf arnica		5		
				quaking aspen		5		
				slender wheatgrass		5		
Namlot----------	Mountain Shallow Sandy Loam (Ponderosa Pine)	Favorable	800	bluegrass		15	ponderosa pine	35
		Normal	600	elk sedge		10		
		Unfavorable	350	mountain big sagebrush		10		
				needleandthread		10		
				other perennial forbs		10		
				other perennial grasses		10		
				other shrubs		10		
				Indian ricegrass		5		
				Oregongrape		5		
				antelope bitterbrush		5		
				birchleaf mountain mahogany		5		
				mountain snowberry		5		

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
262:								
Gompers---------	Upland Shallow Loam (Pinyon-Utah Juniper)	Favorable	500	birchleaf mountain mahogany	15		twoneedle pinyon	25
		Normal	350	other perennial forbs	15		Utah juniper	25
		Unfavorable	200	other shrubs	15			
				Indian ricegrass	10			
				Mormon tea	10			
				bluebunch wheatgrass	10			
				other perennial grasses	10			
				saline wildrye	10			
				Mexican cliffrose	5			
263:								
Hanksville------	Desert Shallow Clay (Mat Saltbush)	Favorable	300	mat saltbush	60		---	---
		Normal	200	galleta	10			
		Unfavorable	100	other shrubs	10			
				Native American pipeweed	5			
				bud sagebrush	5			
				other perennial forbs	5			
				other perennial grasses	5			
264:								
Mikim-----------	Semidesert Loam (Wyoming Big Sagebrush)	Favorable	900	Indian ricegrass	20		---	---
		Normal	700	Wyoming big sagebrush	20			
		Unfavorable	500	bottlebrush squirreltail	10			
				galleta	10			
				needleandthread	10			
				other perennial forbs	10			
				globemallow	5			
				other perennial grasses	5			
				other shrubs	5			
				winterfat	5			
265:								
Mikim-----------	Alkali Flat (Black Greasewood)	Favorable	1,000	greasewood	30		---	---
		Normal	700	other shrubs	15			
		Unfavorable	500	alkali sacaton	10			
				bottlebrush squirreltail	10			
				shadscale saltbush	10			
				Indian ricegrass	5			
				galleta	5			
				other perennial forbs	5			
				other perennial grasses	5			
				seepweed	5			
266:								
Rock outcrop----	---	Favorable	---				---	---
		Normal	---					
		Unfavorable	---					
Boxring---------	Upland Shallow Loam (Pinyon-Utah Juniper)	Favorable	450	bluebunch wheatgrass	30		twoneedle pinyon	30
		Normal	300	black sagebrush	15		Utah juniper	30
		Unfavorable	200	prairie Junegrass	15			
				bluegrass	10			
				other shrubs	10			
				needleandthread	5			
				other perennial forbs	5			
				other perennial grasses	5			
				stemless goldenweed	5			

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
266:								
Tridell---------	Upland Stony Loam (Pinyon-Utah Juniper)	Favorable	800	black sagebrush		25	twoneedle pinyon	60
		Normal	600	birchleaf mountain mahogany		15	Utah juniper	60
		Unfavorable	400	bluebunch wheatgrass		15		
				other shrubs		10		
				Indian ricegrass		5		
				Mormon tea		5		
				needleandthread		5		
				other perennial forbs		5		
				other perennial grasses		5		
				prairie Junegrass		5		
				slender buckwheat		5		
267:								
Solirec---------	Semidesert Loam (Wyoming Big Sagebrush)	Favorable	900	Indian ricegrass	20		---	---
		Normal	700	Wyoming big sagebrush	20			
		Unfavorable	500	bottlebrush squirreltail	10			
				galleta	10			
				needleandthread	10			
				other perennial forbs	10			
				globemallow	5			
				other perennial grasses	5			
				other shrubs	5			
				winterfat	5			
Abracon---------	Semidesert Loam (Wyoming Big Sagebrush)	Favorable	900	Indian ricegrass	20		---	---
		Normal	700	Wyoming big sagebrush	20			
		Unfavorable	500	bottlebrush squirreltail	10			
				galleta	10			
				needleandthread	10			
				other perennial forbs	10			
				globemallow	5			
				other perennial grasses	5			
				other shrubs	5			
				winterfat	5			
Begay-----------	Semidesert Sandy Loam (Fourwing Saltbush)	Favorable	800	Indian ricegrass	20		---	---
		Normal	650	needleandthread	15			
		Unfavorable	450	other perennial grasses	15			
				other shrubs	15			
				fourwing saltbush	10			
				galleta	10			
				other perennial forbs	10			
				Wyoming big sagebrush	5			
268:								
Toliver---------	Upland Very Steep Stony Loam (Pinyon-Utah Juniper)	Favorable	500	birchleaf mountain mahogany	20		---	---
		Normal	400	black sagebrush	20			
		Unfavorable	200	other shrubs	15			
				other perennial forbs	10			
				Indian ricegrass	5			
				Mormon tea	5			
				Utah juniper	5			
				antelope bitterbrush	5			
				bluebunch wheatgrass	5			
				needleandthread	5			
				other perennial grasses	5			
				twoneedle pinyon	5			
Rock outcrop----	---	Favorable	---				---	---
		Normal	---					
		Unfavorable	---					

Table 7.--Ecological sites and characteristic native vegetation--Continued

Map symbol and soil name	Ecological site	Total production		Characteristic native vegetation	Composition		Common trees	Site index
		Kind of year	Dry weight		Range-land	Forest		
			Lb/acre		Pct.	Pct.		
269:								
Walknolls-------	Semidesert Shallow Loam (Utah Juniper-Pinyon)	Favorable	350	black sagebrush	20		Utah juniper	25
		Normal	250	other shrubs	20		twoneedle pinyon	25
		Unfavorable	150	saline wildrye	20			
				Mormon tea	10			
				bluebunch wheatgrass	10			
				other perennial grasses	10			
				galleta	5			
				other perennial forbs	5			
Badland---------	---	Favorable	---				---	---
		Normal	---					
		Unfavorable	---					
Rock outcrop----	---	Favorable	---				---	---
		Normal	---					
		Unfavorable	---					
270:								
Walknolls-------	Semidesert Shallow Loam (Wyoming Big Sagebrush)	Favorable	500	Wyoming big sagebrush	35		---	---
		Normal	400	Indian ricegrass	10			
		Unfavorable	300	bluegrass	10			
				other perennial forbs	10			
				other shrubs	10			
				shadscale saltbush	10			
				bluebunch wheatgrass	5			
				other perennial grasses	5			
				yellow rabbitbrush	5			
Gilston---------	Semidesert Gravelly Sandy Loam (Wyoming Big Sagebrush)	Favorable	600	Wyoming big sagebrush	30		---	---
		Normal	400	other perennial forbs	10			
		Unfavorable	250	other shrubs	10			
				rubber rabbitbrush	10			
				spiny hopsage	10			
				Indian ricegrass	5			
				bluegrass	5			
				bottlebrush squirreltail	5			
				horsebrush	5			
				other perennial grasses	5			
				shadscale saltbush	5			
271:								
Water-----------	---	Favorable	---				---	---
		Normal	---					
		Unfavorable	---					

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1:							
Abor	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.45	Restricted permeability	0.45	Restricted permeability	0.45
						Depth to bedrock	0.03
2:							
Abor	80	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.45	Restricted permeability	0.45	Restricted permeability	0.45
						Depth to bedrock	0.03
3:							
Adderton	90	Very limited		Not limited		Very limited	
		Flooding	1.00			Slope	1.00
4:							
Almy	90	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
		Restricted permeability	0.21	Restricted permeability	0.21	Dusty	0.50
		Slope	0.04	Slope	0.04	Restricted permeability	0.21
5:							
Apmay	90	Very limited		Somewhat limited		Somewhat limited	
		Flooding	1.00	Depth to saturated zone	0.03	Depth to saturated zone	0.07
		Depth to saturated zone	0.07				
6:							
Avalon	45	Somewhat limited		Somewhat limited		Very limited	
		Restricted permeability	0.21	Restricted permeability	0.21	Slope	1.00
						Restricted permeability	0.21
Mack	45	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
		Restricted permeability	0.21	Restricted permeability	0.21	Dusty	0.50
						Restricted permeability	0.21
7:							
Avalon	30	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
		Restricted permeability	0.21	Restricted permeability	0.21	Dusty	0.50
						Restricted permeability	0.21

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
7:							
Persayo, moist------	25	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Dusty	0.50	Dusty	0.50	Dusty	0.50
						Gravel content	0.24
						Content of large stones	0.20
Degater------------	20	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Restricted permeability	1.00
		Too clayey	1.00	Too clayey	1.00	Too clayey	1.00
						Depth to bedrock	0.01
8:							
Badland------------	90	Not rated		Not rated		Not rated	
9:							
Baroid-------------	55	Very limited		Somewhat limited		Somewhat limited	
		Flooding	1.00	Too sandy	0.27	Too sandy	0.27
		Too sandy	0.27	Salinity	0.13	Salinity	0.13
		Salinity	0.13				
Eghelm-------------	35	Very limited		Very limited		Very limited	
		Flooding	1.00	Sodium content	1.00	Sodium content	1.00
		Sodium content	1.00	Too sandy	0.01	Too sandy	0.01
		Too sandy	0.01				
10:							
Battlement----------	85	Very limited		Not limited		Not limited	
		Flooding	1.00				
11:							
Battlement, saline--	80	Very limited		Somewhat limited		Somewhat limited	
		Flooding	1.00	Dusty	0.50	Dusty	0.50
		Dusty	0.50				
12:							
Berlake------------	85	Not limited		Not limited		Very limited	
						Slope	1.00
13:							
Berlake------------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
14:							
Berlake------------	55	Not limited		Not limited		Very limited	
						Slope	1.00
Maysprings----------	30	Not limited		Not limited		Very limited	
						Slope	1.00
						Gravel content	0.06
15:							
Berlake------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Taffom-------------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
15:							
Gretdivid	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.67	Too sandy	0.67	Too sandy	0.67
16:							
Bilhil	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Restricted permeability	0.45	Restricted permeability	0.45	Restricted permeability	0.45
17:							
Binco	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.45	Restricted permeability	0.45	Content of large stones	1.00
		Too stony	0.19	Too stony	0.19	Gravel content	0.91
		Content of large stones	0.05	Content of large stones	0.05	Restricted permeability	0.45
						Too stony	0.19
18:							
Boltus	50	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Restricted permeability	0.41	Restricted permeability	0.41	Slope	1.00
						Restricted permeability	0.41
Beamton	25	Somewhat limited		Somewhat limited		Very limited	
		Restricted permeability	0.41	Restricted permeability	0.41	Slope	1.00
						Restricted permeability	0.41
						Depth to bedrock	0.20
19:							
Borollic Natrargids	40	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
						Slope	0.12
Borollic Haplargids	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
		Restricted permeability	0.21	Restricted permeability	0.21	Restricted permeability	0.21
Ustic Torrifluvents	25	Very limited		Not limited		Not limited	
		Flooding	1.00				
20:							
Brownsto	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Gravel content	1.00
		Dusty	0.50	Dusty	0.50	Slope	1.00
		Gravel content	0.18	Gravel content	0.18	Dusty	0.50
Castee	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
		Dusty	0.50	Dusty	0.50	Dusty	0.50

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
21:							
Bulkley	80	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.41	Restricted permeability	0.41	Content of large stones	0.95
		Content of large stones	0.01	Content of large stones	0.01	Restricted permeability	0.41
22:							
Bulkley	80	Somewhat limited		Somewhat limited		Very limited	
		Too clayey	0.50	Too clayey	0.50	Slope	1.00
		Restricted permeability	0.45	Restricted permeability	0.45	Too clayey	0.50
						Restricted permeability	0.45
23:							
Bulkley	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50	Too clayey	0.50	Too clayey	0.50
		Restricted permeability	0.45	Restricted permeability	0.45	Restricted permeability	0.45
24:							
Bulkley	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Gravel content	0.92	Gravel content	0.92	Slope	1.00
		Restricted permeability	0.45	Restricted permeability	0.45	Content of large stones	0.92
						Restricted permeability	0.45
Quilt	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.96	Restricted permeability	0.96	Gravel content	1.00
		Gravel content	0.22	Gravel content	0.22	Restricted permeability	0.96
						Content of large stones	0.01
25:							
Campspass	90	Somewhat limited		Somewhat limited		Very limited	
		Restricted permeability	0.96	Restricted permeability	0.96	Slope	1.00
						Restricted permeability	0.96
26:							
Campspass	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.96	Restricted permeability	0.96	Restricted permeability	0.96
27:							
Canlodore	95	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
28:							
Carbol	40	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
						Slope	1.00

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
28:							
Irigul	25	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	0.96	Slope	0.96	Gravel content	1.00
		Gravel content	0.04	Gravel content	0.04	Slope	1.00
						Content of large stones	0.54
Rock outcrop	25	Not rated		Not rated		Not rated	
29:							
Carbol	45	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
						Slope	1.00
Miracle	30	Not limited		Not limited		Very limited	
						Slope	1.00
						Gravel content	0.06
						Depth to bedrock	0.03
30:							
Carmody	35	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.70	Too sandy	0.70	Slope	1.00
		Slope	0.37	Slope	0.37	Depth to bedrock	0.95
						Too sandy	0.70
Rock River	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Slope	0.37	Slope	1.00
Crestman	20	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Too sandy	0.70	Too sandy	0.70	Depth to bedrock	1.00
		Slope	0.37	Slope	0.37	Too sandy	0.70
						Gravel content	0.22
31:							
Castee	90	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
						Dusty	0.50
32:							
Chroder	80	Not limited		Not limited		Very limited	
						Slope	1.00
33:							
Clayburn, warm	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
		Restricted permeability	0.21	Restricted permeability	0.21	Restricted permeability	0.21
34:							
Clayburn	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Content of large stones	0.01
Foidel	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
35:							
Clayburn	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.21	Restricted permeability	0.21	Restricted permeability	0.21
Youga, moist	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.21	Restricted permeability	0.21	Restricted permeability	0.21
36:							
Clifsand	60	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.79	Too sandy	0.79	Slope	1.00
						Too sandy	0.79
						Content of large stones	0.01
Chroder	30	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.75	Too sandy	0.75	Slope	1.00
						Too sandy	0.75
37:							
Cochetopa	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.96	Restricted permeability	0.96	Restricted permeability	0.96
38:							
Cochetopa	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.96	Restricted permeability	0.96	Restricted permeability	0.96
39:							
Cochetopa, warm	85	Somewhat limited		Somewhat limited		Very limited	
		Restricted permeability	0.96	Restricted permeability	0.96	Slope	1.00
						Restricted permeability	0.96
40:							
Cochetopa	45	Somewhat limited		Somewhat limited		Very limited	
		Restricted permeability	0.96	Restricted permeability	0.96	Slope	1.00
		Slope	0.84	Slope	0.84	Restricted permeability	0.96
Gothic	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.96	Restricted permeability	0.96	Content of large stones	1.00
		Content of large stones	0.68	Content of large stones	0.68	Restricted permeability	0.96
						Gravel content	0.01

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
41:							
Cochetopa	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.96	Restricted permeability	0.96	Content of large stones	1.00
		Content of large stones	0.14	Content of large stones	0.14	Restricted permeability	0.96
						Gravel content	0.14
Gothic	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.96	Restricted permeability	0.96	Restricted permeability	0.96
						Content of large stones	0.54
						Gravel content	0.05
42:							
Cochetopa	50	Somewhat limited		Somewhat limited		Very limited	
		Restricted permeability	0.96	Restricted permeability	0.96	Slope	1.00
		Slope	0.04	Slope	0.04	Restricted permeability	0.96
Jerry	35	Somewhat limited		Somewhat limited		Very limited	
		Restricted permeability	0.96	Restricted permeability	0.96	Content of large stones	1.00
		Content of large stones	0.10	Content of large stones	0.10	Slope	1.00
		Slope	0.04	Slope	0.04	Restricted permeability	0.96
						Gravel content	0.32
43:							
Coldspring, moist	80	Not limited		Not limited		Very limited	
						Slope	1.00
44:							
Cowestglen	80	Very limited		Not limited		Not limited	
		Flooding	1.00				
45:							
Coyet	90	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.72	Too sandy	0.72	Slope	1.00
						Too sandy	0.72
46:							
Coyet	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.72	Too sandy	0.72	Too sandy	0.72
47:							
Coyet	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.72	Too sandy	0.72	Too sandy	0.72
Crestman, moist	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Too sandy	0.70	Too sandy	0.70	Too sandy	0.70
						Gravel content	0.22

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
48:							
Crago	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Dusty	0.50	Dusty	0.50	Gravel content	1.00
		Content of large stones	0.02	Content of large stones	0.02	Content of large stones	1.00
		Gravel content	0.01	Gravel content	0.01	Dusty	0.50
Pensore	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Dusty	0.50	Dusty	0.50	Gravel content	1.00
		Gravel content	0.22	Gravel content	0.22	Dusty	0.50
						Content of large stones	0.01
Grapit	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Dusty	0.50	Dusty	0.50	Gravel content	1.00
		Gravel content	0.09	Gravel content	0.09	Dusty	0.50
						Content of large stones	0.20
49:							
Cryoborolls, slumped	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.96	Restricted permeability	0.96	Restricted permeability	0.96
						Content of large stones	0.08
50:							
Cushool	85	Not limited		Not limited		Very limited	
						Slope	1.00
						Depth to bedrock	0.84
51:							
Cushool	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Depth to bedrock	0.84
52:							
Danavore	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Content of large stones	1.00
		Content of large stones	0.71	Content of large stones	0.71	Slope	1.00
						Depth to bedrock	0.97
						Gravel content	0.76
Waybe	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Restricted permeability	0.96	Restricted permeability	0.96	Slope	1.00
		Gravel content	0.02	Gravel content	0.02	Restricted permeability	0.96
						Content of large stones	0.03

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
53:							
Davtone	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.21	Restricted permeability	0.21	Restricted permeability	0.21
Forsey	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.03	Content of large stones	0.03	Content of large stones	1.00
						Gravel content	0.27
54:							
Deaver	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.41	Restricted permeability	0.41	Gravel content	1.00
		Gravel content	0.02	Gravel content	0.02	Depth to bedrock	0.46
						Restricted permeability	0.41
						Content of large stones	0.03
Avalon	30	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
		Restricted permeability	0.21	Restricted permeability	0.21	Dusty	0.50
		Slope	0.04	Slope	0.04	Restricted permeability	0.21
55:							
Deaver	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.41	Restricted permeability	0.41	Restricted permeability	0.41
						Depth to bedrock	0.10
Chipeta	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.45	Restricted permeability	0.45	Restricted permeability	0.45
56:							
Debone	90	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Dusty	0.50	Dusty	0.50	Dusty	0.50
57:							
Detra	50	Not limited		Not limited		Very limited	
						Slope	1.00
Cortyzack	40	Not limited		Not limited		Very limited	
						Slope	1.00
58:							
Diaflats	45	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
		Slope	0.04	Slope	0.04	Depth to bedrock	0.80
						Dusty	0.50

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
58:							
Fondillas	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Dusty	0.50	Dusty	0.50	Slope	1.00
		Slope	0.04	Slope	0.04	Dusty	0.50
59:							
Dranyon	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
		Restricted permeability	0.21	Restricted permeability	0.21	Restricted permeability	0.21
60:							
Dumps, mine	100	Not rated		Not rated		Not rated	
61:							
Ecklund	50	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.70	Too sandy	0.70	Slope	1.00
						Too sandy	0.70
						Depth to bedrock	0.06
Tipperary	40	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.70	Too sandy	0.70	Slope	1.00
						Too sandy	0.70
62:							
Eghelm	90	Very limited		Somewhat limited		Somewhat limited	
		Flooding	1.00	Too sandy	0.58	Too sandy	0.58
		Too sandy	0.58				
63:							
Eghelm, moist	90	Very limited		Somewhat limited		Somewhat limited	
		Flooding	1.00	Too sandy	0.60	Too sandy	0.60
		Too sandy	0.60				
64:							
Emlin	85	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
						Dusty	0.50
65:							
Emlin	65	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
						Dusty	0.50
Tymosling	20	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Gravel content	1.00
		Gravel content	1.00	Gravel content	1.00	Restricted permeability	1.00
		Slope	0.16	Slope	0.16	Slope	1.00
						Content of large stones	0.11
						Depth to bedrock	0.10
66:							
Evanot	90	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
						Dusty	0.50

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
67:							
Evanot	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Dusty	0.50	Dusty	0.50	Dusty	0.50
68:							
Evanot	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
		Dusty	0.50	Dusty	0.50	Dusty	0.50
Yamo	25	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
		Dusty	0.50	Dusty	0.50	Dusty	0.50
69:							
Fenster	45	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
						Dusty	0.50
						Gravel content	0.06
Thenipel	30	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
						Dusty	0.50
70:							
Fluvaquents, frequently flooded	50	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Flooding	0.40	Flooding	1.00
						Content of large stones	0.03
						Gravel content	0.02
Haplaquolls, frequently flooded	45	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Flooding	0.40	Flooding	1.00
71:							
Flygare, dry	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.21	Restricted permeability	0.21	Restricted permeability	0.21
72:							
Foidel, cool	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
		Restricted permeability	0.21	Restricted permeability	0.21	Restricted permeability	0.21
73:							
Foidel	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.21	Restricted permeability	0.21	Restricted permeability	0.21

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
74:							
Foidel, moist-------	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
		Restricted permeability	0.21	Restricted permeability	0.21	Restricted permeability	0.21
Flygare------------	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
		Restricted permeability	0.21	Restricted permeability	0.21	Restricted permeability	0.21
Skyway, moist-------	20	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
						Depth to bedrock	0.35
						Content of large stones	0.01
75:							
Fonce---------------	90	Not limited		Not limited		Somewhat limited	
						Slope	0.88
76:							
Fonce---------------	90	Somewhat limited		Somewhat limited		Very limited	
		Gravel content	0.03	Gravel content	0.03	Gravel content	1.00
						Slope	1.00
						Content of large stones	0.01
77:							
Forelle------------	85	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
						Dusty	0.50
						Content of large stones	0.03
78:							
Forelle------------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Dusty	0.50	Dusty	0.50	Dusty	0.50
						Content of large stones	0.03
79:							
Forelle------------	50	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
						Dusty	0.50
						Content of large stones	0.03
Evanot--------------	40	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
						Dusty	0.50
80:							
Forelle------------	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Dusty	0.50	Dusty	0.50	Dusty	0.50
						Content of large stones	0.03

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
80:							
Evanot	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Dusty	0.50	Dusty	0.50	Dusty	0.50
81:							
Forelle	40	Somewhat limited		Somewhat limited		Somewhat limited	
		Dusty	0.50	Dusty	0.50	Slope	0.88
						Dusty	0.50
						Content of large stones	0.03
Obadia	35	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
						Slope	0.88
82:							
Forelle	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.84	Slope	0.84	Slope	1.00
		Dusty	0.50	Dusty	0.50	Dusty	0.50
						Content of large stones	0.03
Pinelli	30	Somewhat limited		Somewhat limited		Very limited	
		Restricted permeability	0.96	Restricted permeability	0.96	Slope	1.00
		Slope	0.84	Slope	0.84	Restricted permeability	0.96
		Dusty	0.50	Dusty	0.50	Dusty	0.50
Maysprings	15	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.84	Slope	0.84	Slope	1.00
		Too sandy	0.67	Too sandy	0.67	Too sandy	0.67
						Gravel content	0.06
83:							
Forsey	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Content of large stones	1.00
		Content of large stones	0.03	Content of large stones	0.03	Slope	1.00
						Gravel content	0.27
Libeg	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.04	Slope	0.04	Slope	1.00
						Gravel content	0.22
84:							
Gebson, moist	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Content of large stones	1.00
		Content of large stones	0.77	Content of large stones	0.77	Slope	1.00
						Gravel content	0.29
Youga	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.16	Slope	0.16	Slope	1.00

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
85:							
Giarch	90	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Flooding	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Restricted permeability	1.00				
86:							
Gracot	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Gravel content	1.00	Gravel content	1.00	Slope	1.00
		Too sandy	0.60	Too sandy	0.60	Too sandy	0.60
						Content of large stones	0.54
Maybell	30	Very limited		Very limited		Very limited	
		Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
87:							
Gretdivid	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.67	Too sandy	0.67	Too sandy	0.67
Taffom	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Abor	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50	Too clayey	0.50	Too clayey	0.50
		Restricted permeability	0.45	Restricted permeability	0.45	Depth to bedrock	0.46
						Restricted permeability	0.45
88:							
Grieves	85	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.70	Too sandy	0.70	Slope	1.00
						Too sandy	0.70
89:							
Grieves	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.70	Too sandy	0.70	Too sandy	0.70
90:							
Grieves	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.70	Too sandy	0.70	Too sandy	0.70
Crestman	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Too sandy	0.70	Too sandy	0.70	Too sandy	0.70
		Restricted permeability	0.41	Restricted permeability	0.41	Restricted permeability	0.41
						Gravel content	0.22
91:							
Grieves	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.70	Too sandy	0.70	Too sandy	0.70

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
91:							
Yamo	25	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.04	Slope	0.04	Slope	1.00
Crestman	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Too sandy	0.70	Too sandy	0.70	Too sandy	0.70
						Gravel content	0.22
92:							
Grimm	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.78	Too sandy	0.78	Content of large stones	1.00
		Gravel content	0.37	Gravel content	0.37		
		Content of large stones	0.32	Content of large stones	0.32	Gravel content	1.00
						Too sandy	0.78
Ustic Torriorthents, shallow	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Content of large stones	0.35	Content of large stones	0.35	Content of large stones	1.00
		Gravel content	0.01	Gravel content	0.01	Gravel content	1.00
93:							
Gullied land	85	Not rated		Not rated		Not rated	
94:							
Hapney, moist	90	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Restricted permeability	0.41	Restricted permeability	0.41	Restricted permeability	0.41
95:							
Haterton	60	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Dusty	0.50	Dusty	0.50	Slope	1.00
						Dusty	0.50
						Gravel content	0.06
Piezon	30	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
						Depth to bedrock	0.95
						Dusty	0.50
96:							
Heathcoat	85	Somewhat limited		Somewhat limited		Very limited	
		Restricted permeability	0.96	Restricted permeability	0.96	Content of large stones	1.00
		Content of large stones	0.05	Content of large stones	0.05	Restricted permeability	0.96
						Slope	0.50
						Gravel content	0.10
97:							
Heathcoat	60	Somewhat limited		Somewhat limited		Very limited	
		Restricted permeability	0.96	Restricted permeability	0.96	Slope	1.00
		Slope	0.84	Slope	0.84	Restricted permeability	0.96

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
97:							
Clayburn	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.21	Restricted permeability	0.21	Restricted permeability	0.21
98:							
Herm	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.96	Restricted permeability	0.96	Content of large stones	0.99
		Content of large stones	0.01	Content of large stones	0.01	Restricted permeability	0.96
Fughes	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.96	Restricted permeability	0.96	Content of large stones	1.00
		Content of large stones	0.14	Content of large stones	0.14	Restricted permeability	0.96
99:							
Hesperus, dry	85	Somewhat limited		Somewhat limited		Very limited	
		Restricted permeability	0.21	Restricted permeability	0.21	Slope	1.00
		Slope	0.04	Slope	0.04	Restricted permeability	0.21
100:							
Hesperus	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.21	Restricted permeability	0.21	Restricted permeability	0.21
101:							
Hesperus	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
		Restricted permeability	0.21	Restricted permeability	0.21	Restricted permeability	0.21
102:							
Holter	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.21	Restricted permeability	0.21	Content of large stones	1.00
		Content of large stones	0.08	Content of large stones	0.08	Gravel content	0.35
						Restricted permeability	0.21
Detra	30	Somewhat limited		Somewhat limited		Very limited	
		Restricted permeability	0.21	Restricted permeability	0.21	Slope	1.00
						Restricted permeability	0.21
103:							
Iles	85	Somewhat limited		Somewhat limited		Very limited	
		Restricted permeability	0.96	Restricted permeability	0.96	Slope	1.00
						Restricted permeability	0.96

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
104:							
Ironco	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Content of large stones	1.00
		Content of large stones	0.77	Content of large stones	0.77	Slope	1.00
						Gravel content	0.29
Mulgon, dry	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.21	Restricted permeability	0.21	Restricted permeability	0.21
105:							
Ironsprings	85	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.79	Too sandy	0.79	Slope	1.00
						Too sandy	0.79
106:							
Ironsprings	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.79	Too sandy	0.79	Too sandy	0.79
107:							
Ironsprings	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.67	Too sandy	0.67	Too sandy	0.67
						Gravel content	0.06
Maysprings	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.67	Too sandy	0.67	Too sandy	0.67
						Gravel content	0.06
Gretdivid	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.67	Too sandy	0.67	Too sandy	0.67
108:							
Jerry	50	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
Cochetopa	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.96	Restricted permeability	0.96	Restricted permeability	0.96
109:							
Joebas	60	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Gravel content	0.01	Gravel content	0.01	Gravel content	1.00
						Content of large stones	0.08
Rock outcrop	30	Not rated		Not rated		Not rated	

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
110:							
Kemmerer	80	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Restricted permeability	1.00
						Depth to bedrock	0.97
111:							
Kemmerer	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Restricted permeability	1.00	Restricted permeability	1.00	Slope	1.00
		Gravel content	1.00	Gravel content	1.00	Restricted permeability	1.00
						Depth to bedrock	0.74
						Content of large stones	0.20
Grapit	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.26	Content of large stones	0.26	Content of large stones	1.00
		Gravel content	0.04	Gravel content	0.04	Gravel content	1.00
112:							
Kemmerer	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
						Depth to bedrock	0.97
Moyerson	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Restricted permeability	0.41	Restricted permeability	0.41	Restricted permeability	0.41
113:							
Kemmerer	60	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
						Depth to bedrock	0.97
Yamo	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Dusty	0.50	Dusty	0.50	Dusty	0.50
114:							
Lamphier	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
115:							
Lamphier	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
116:							
Lamphier	45	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
116:							
Jerry	30	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Slope	0.96	Slope	0.96	Slope	1.00
117:							
Lamphier	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Jerry	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
118:							
Lander	85	Very limited		Somewhat limited		Somewhat limited	
		Flooding	1.00	Restricted permeability	0.21	Restricted permeability	0.21
		Restricted permeability	0.21				
119:							
Langspring	85	Not limited		Not limited		Very limited	
						Slope	1.00
120:							
Layoint	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.76	Too sandy	0.76	Slope	0.88
						Too sandy	0.76
						Depth to bedrock	0.29
Moosed	25	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	0.37	Slope	0.37	Slope	1.00
		Too sandy	0.27	Too sandy	0.27	Too sandy	0.27
Berlake	20	Not limited		Not limited		Very limited	
						Slope	1.00
121:							
Leaps	90	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Slope	0.04	Slope	0.04	Slope	1.00
122:							
Leswill	50	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Restricted permeability	0.21	Restricted permeability	0.21	Slope	0.50
						Restricted permeability	0.21
Rogrube	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Dusty	0.50	Dusty	0.50	Slope	0.50
		Restricted permeability	0.21	Restricted permeability	0.21	Dusty	0.50
						Restricted permeability	0.21

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
123:							
Lilsnake	45	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	0.63	Slope	0.63	Slope	1.00
		Dusty	0.50	Dusty	0.50	Dusty	0.50
Sandwash	30	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
						Dusty	0.50
						Depth to bedrock	0.10
124:							
Losee	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Content of large stones	1.00
		Content of large stones	0.26	Content of large stones	0.26	Slope	1.00
						Gravel content	0.88
Thornburgh, dry	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Content of large stones	1.00
		Content of large stones	0.88	Content of large stones	0.88	Slope	1.00
						Gravel content	0.13
125:							
Massadona	85	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
						Slope	1.00
126:							
Massadona	65	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Dusty	0.50	Dusty	0.50	Slope	0.88
						Dusty	0.50
Youngston, moist	20	Very limited		Somewhat limited		Somewhat limited	
		Flooding	1.00	Dusty	0.50	Dusty	0.50
		Dusty	0.50				
127:							
Maudlin	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.04	Slope	0.04	Slope	1.00
		Too sandy	0.01	Too sandy	0.01	Depth to bedrock	0.46
						Too sandy	0.01
Duffymont	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Content of large stones	1.00
		Content of large stones	0.92	Content of large stones	0.92	Depth to bedrock	1.00
		Slope	0.04	Slope	0.04	Slope	1.00
						Gravel content	0.02
128:							
Maybell	90	Very limited		Very limited		Very limited	
		Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
						Slope	1.00

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
129:							
Maybell	90	Very limited		Very limited		Very limited	
		Too sandy	1.00	Too sandy	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Too sandy	1.00
130:							
Maysprings	85	Not limited		Not limited		Very limited	
						Slope	1.00
						Gravel content	0.06
131:							
Maysprings	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.67	Too sandy	0.67	Too sandy	0.67
						Gravel content	0.06
Gretdivid	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.67	Too sandy	0.67	Too sandy	0.67
132:							
Milren	80	Somewhat limited		Somewhat limited		Somewhat limited	
		Restricted permeability	0.96	Restricted permeability	0.96	Restricted permeability	0.96
						Slope	0.88
133:							
Miracle	50	Not limited		Not limited		Very limited	
						Slope	1.00
						Gravel content	0.06
						Depth to bedrock	0.03
Coldspring	30	Not limited		Not limited		Very limited	
						Slope	1.00
134:							
Morapos	85	Somewhat limited		Somewhat limited		Very limited	
		Restricted permeability	0.96	Restricted permeability	0.96	Slope	1.00
						Restricted permeability	0.96
135:							
Morapos	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.96	Restricted permeability	0.96	Restricted permeability	0.96
136:							
Morapos	40	Somewhat limited		Somewhat limited		Very limited	
		Restricted permeability	0.96	Restricted permeability	0.96	Slope	1.00
						Restricted permeability	0.96
Pagoda	40	Somewhat limited		Somewhat limited		Very limited	
		Restricted permeability	0.96	Restricted permeability	0.96	Slope	1.00
						Restricted permeability	0.96
137:							
Morset	50	Not limited		Not limited		Very limited	
						Slope	1.00

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
137:							
Youga	30	Not limited		Not limited		Very limited	
						Slope	1.00
138:							
Moyerson	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Restricted permeability	0.41	Restricted permeability	0.41	Restricted permeability	0.41
Rentsac	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Gravel content	0.04	Gravel content	0.04	Gravel content	1.00
						Content of large stones	0.54
139:							
Muggins	85	Somewhat limited		Somewhat limited		Very limited	
		Restricted permeability	0.96	Restricted permeability	0.96	Slope	1.00
		Slope	0.63	Slope	0.63	Restricted permeability	0.96
140:							
Ninot	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Gravel content	1.00	Gravel content	1.00	Slope	1.00
		Dusty	0.50	Dusty	0.50	Dusty	0.50
						Content of large stones	0.01
Crago	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Dusty	0.50	Dusty	0.50	Gravel content	1.00
		Content of large stones	0.02	Content of large stones	0.02	Content of large stones	1.00
		Gravel content	0.01	Gravel content	0.01	Dusty	0.50
Garlips	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.21	Restricted permeability	0.21	Restricted permeability	0.21
141:							
Nortez, cool	50	Somewhat limited		Somewhat limited		Very limited	
		Restricted permeability	0.96	Restricted permeability	0.96	Slope	1.00
						Restricted permeability	0.96
						Depth to bedrock	0.46
Morapos	40	Somewhat limited		Somewhat limited		Very limited	
		Restricted permeability	0.96	Restricted permeability	0.96	Slope	1.00
						Restricted permeability	0.96

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
142:							
Nortez, cool	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.96	Restricted permeability	0.96	Restricted permeability	0.96
						Depth to bedrock	0.46
Morapos	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.96	Restricted permeability	0.96	Restricted permeability	0.96
143:							
Nunemaker	90	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Sodium content	1.00	Sodium content	1.00	Slope	1.00
						Sodium content	1.00
144:							
Pagoda	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.96	Restricted permeability	0.96	Restricted permeability	0.96
145:							
Pagoda	85	Somewhat limited		Somewhat limited		Very limited	
		Restricted permeability	0.96	Restricted permeability	0.96	Slope	1.00
						Restricted permeability	0.96
146:							
Pavillion	60	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
		Dusty	0.50	Dusty	0.50	Dusty	0.50
		Restricted permeability	0.21	Restricted permeability	0.21	Restricted permeability	0.21
						Depth to bedrock	0.06
Degater	25	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Gravel content	1.00
		Gravel content	1.00	Gravel content	1.00	Restricted permeability	1.00
		Too clayey	1.00	Too clayey	1.00	Slope	1.00
		Slope	0.63	Slope	0.63	Too clayey	1.00
						Depth to bedrock	0.46
147:							
Peeler	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
148:							
Pilotpeak	45	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Gravel content	1.00
		Gravel content	0.50	Gravel content	0.50	Depth to bedrock	1.00
						Slope	1.00
Grubrob	35	Not limited		Not limited		Somewhat limited	
						Depth to bedrock	0.65
						Slope	0.50

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
149:							
Pinelli	85	Somewhat limited		Somewhat limited		Very limited	
		Restricted permeability	0.96	Restricted permeability	0.96	Slope	1.00
		Dusty	0.50	Dusty	0.50	Restricted permeability	0.96
						Dusty	0.50
150:							
Pinelli	85	Somewhat limited		Somewhat limited		Very limited	
		Restricted permeability	0.96	Restricted permeability	0.96	Slope	1.00
		Slope	0.04	Slope	0.04	Restricted permeability	0.96
151:							
Pinelli, dry	85	Somewhat limited		Somewhat limited		Very limited	
		Restricted permeability	0.96	Restricted permeability	0.96	Slope	1.00
		Dusty	0.50	Dusty	0.50	Restricted permeability	0.96
						Dusty	0.50
152:							
Pinridge	85	Very limited		Not limited		Very limited	
		Flooding	1.00			Slope	1.00
153:							
Pricecreek	85	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
154:							
Quealman	90	Very limited		Very limited		Very limited	
		Flooding	1.00	Too sandy	1.00	Too sandy	1.00
		Too sandy	1.00			Flooding	0.60
155:							
Rencot	50	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Content of large stones	1.00
		Slope	0.84	Slope	0.84	Depth to bedrock	1.00
		Content of large stones	0.77	Content of large stones	0.77	Gravel content	1.00
		Dusty	0.50	Dusty	0.50	Slope	1.00
		Gravel content	0.01	Gravel content	0.01	Dusty	0.50
Duffymont	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Content of large stones	1.00
		Content of large stones	0.92	Content of large stones	0.92	Depth to bedrock	1.00
		Slope	0.84	Slope	0.84	Slope	1.00
						Gravel content	0.02
156:							
Rentsac	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Gravel content	0.04	Gravel content	0.04	Gravel content	1.00
						Content of large stones	0.54

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
157:							
Rentsac	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Gravel content	0.95	Gravel content	0.95	Depth to bedrock	1.00
						Content of large stones	0.84
Moyerson	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Restricted permeability	0.41	Restricted permeability	0.41	Gravel content	1.00
		Gravel content	0.07	Gravel content	0.07	Restricted permeability	0.41
						Content of large stones	0.32
158:							
Rock outcrop	70	Not rated		Not rated		Not rated	
Earsman	20	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Content of large stones	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.72	Too sandy	0.72	Depth to bedrock	1.00
		Content of large stones	0.68	Content of large stones	0.68	Gravel content	0.94
						Too sandy	0.72
159:							
Rock outcrop	50	Not rated		Not rated		Not rated	
Haploborolls	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Gravel content	0.16	Gravel content	0.16	Gravel content	1.00
						Depth to bedrock	0.90
						Content of large stones	0.03
160:							
Rock outcrop	70	Not rated		Not rated		Not rated	
Torriorthents	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Gravel content	0.01	Gravel content	0.01	Gravel content	1.00
						Content of large stones	0.84
161:							
Rock River	85	Not limited		Not limited		Not limited	
162:							
Rock River	85	Not limited		Not limited		Very limited	
						Slope	1.00
163:							
Rock River	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
164:							
Rock River	50	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.66	Too sandy	0.66	Slope	1.00
		Slope	0.63	Slope	0.63	Too sandy	0.66
Taffom	25	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
165:							
Rogrube sandy loam	50	Somewhat limited		Somewhat limited		Very limited	
		Restricted permeability	0.21	Restricted permeability	0.21	Slope	1.00
						Restricted permeability	0.21
Rogrube clay loam	25	Somewhat limited		Somewhat limited		Very limited	
		Restricted permeability	0.21	Restricted permeability	0.21	Slope	1.00
						Restricted permeability	0.21
166:							
Routt	80	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
		Restricted permeability	0.96	Restricted permeability	0.96	Restricted permeability	0.96
167:							
Routt	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.96	Restricted permeability	0.96	Restricted permeability	0.96
Cochetopa	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.96	Restricted permeability	0.96	Restricted permeability	0.96
Binco	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.45	Restricted permeability	0.45	Content of large stones	1.00
		Content of large stones	0.05	Content of large stones	0.05	Gravel content	0.91
						Restricted permeability	0.45
168:							
Ruedloff	85	Not limited		Not limited		Somewhat limited	
						Slope	0.88
169:							
Ruedloff	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.67	Too sandy	0.67	Too sandy	0.67
						Gravel content	0.06

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
169:							
Dunul	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Too sandy	0.67	Too sandy	0.67	Slope	1.00
		Gravel content	0.55	Gravel content	0.55	Too sandy	0.67
						Content of large stones	0.32
170:							
Ryan Park	85	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.79	Too sandy	0.79	Slope	1.00
		Slope	0.04	Slope	0.04	Too sandy	0.79
171:							
Ryan Park	85	Not limited		Not limited		Not limited	
172:							
Ryan Park	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.79	Too sandy	0.79	Too sandy	0.79
Coyet	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.72	Too sandy	0.72	Too sandy	0.72
173:							
Ryark	65	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.79	Too sandy	0.79	Slope	1.00
		Slope	0.04	Slope	0.04	Too sandy	0.79
Powderwash	20	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Too sandy	0.76	Too sandy	0.76	Slope	1.00
		Slope	0.04	Slope	0.04	Too sandy	0.76
						Depth to bedrock	0.01
174:							
Ryark	70	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.79	Too sandy	0.79	Slope	1.00
						Too sandy	0.79
Maybell	15	Very limited		Very limited		Very limited	
		Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
						Slope	1.00
175:							
Sandwash	40	Somewhat limited		Somewhat limited		Somewhat limited	
		Dusty	0.50	Dusty	0.50	Depth to bedrock	0.97
						Slope	0.50
						Dusty	0.50
Langspring	30	Not limited		Not limited		Somewhat limited	
						Slope	0.50
Baston	20	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
						Depth to bedrock	0.65
						Slope	0.50

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
176:							
Schooner	50	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.33	Too sandy	0.33	Too sandy	0.33
						Gravel content	0.06
Rock outcrop	35	Not rated		Not rated		Not rated	
177:							
Schooner	55	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.33	Too sandy	0.33	Too sandy	0.33
						Gravel content	0.06
Tricera	25	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.60	Too sandy	0.60	Slope	1.00
		Slope	0.16	Slope	0.16	Too sandy	0.60
178:							
Simanni	50	Not limited		Not limited		Very limited	
						Slope	1.00
Ruedloff	40	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.67	Too sandy	0.67	Slope	1.00
						Too sandy	0.67
						Gravel content	0.06
179:							
Skyway, dry	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Depth to bedrock	0.35
						Content of large stones	0.01
180:							
Spool	55	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.70	Too sandy	0.70	Too sandy	0.70
						Content of large stones	0.01
Maybell	30	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.79	Too sandy	0.79	Slope	1.00
		Slope	0.16	Slope	0.16	Too sandy	0.79
181:							
Stunner	90	Not limited		Not limited		Somewhat limited	
						Slope	0.88
182:							
Stunner, moist	55	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
		Restricted permeability	0.21	Restricted permeability	0.21	Dusty	0.50
						Restricted permeability	0.21

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
182:							
Emlin	35	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
						Dusty	0.50
183:							
Styers	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50	Too clayey	0.50	Too clayey	0.50
		Restricted permeability	0.45	Restricted permeability	0.45	Restricted permeability	0.45
						Depth to bedrock	0.10
Ironsprings	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.67	Too sandy	0.67	Too sandy	0.67
						Gravel content	0.06
Maysprings	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.67	Too sandy	0.67	Too sandy	0.67
						Gravel content	0.06
184:							
Styers	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.45	Restricted permeability	0.45	Depth to bedrock	0.65
						Restricted permeability	0.45
Pinelli	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.96	Restricted permeability	0.96	Restricted permeability	0.96
Taffom	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
185:							
Taffom	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.04	Slope	0.04	Slope	1.00
186:							
Talamantes	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Dusty	0.50	Dusty	0.50	Dusty	0.50
						Slope	0.12
187:							
Talamantes	90	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
		Slope	0.37	Slope	0.37	Dusty	0.50
188:							
Talamantes, saline	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Salinity	0.50	Salinity	0.50	Salinity	0.50
		Dusty	0.50	Dusty	0.50	Slope	0.50
						Dusty	0.50

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
189:							
Tipper	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.70	Too sandy	0.70	Too sandy	0.70
						Depth to bedrock	0.65
						Gravel content	0.06
Crustown	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Too sandy	0.70	Too sandy	0.70	Too sandy	0.70
190:							
Tipperary	90	Very limited		Very limited		Very limited	
		Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
		Slope	0.84	Slope	0.84	Slope	1.00
191:							
Tipperary	90	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.70	Too sandy	0.70	Slope	1.00
						Too sandy	0.70
192:							
Tipperary	50	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.70	Too sandy	0.70	Slope	1.00
						Too sandy	0.70
Willwood	40	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.84	Too sandy	0.84	Slope	1.00
						Too sandy	0.84
						Gravel content	0.03
						Content of large stones	0.01
193:							
Tisworth	85	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Restricted permeability	0.96	Restricted permeability	0.96	Restricted permeability	0.96
						Slope	0.88
194:							
Tolman	50	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Content of large stones	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.54	Content of large stones	0.54	Depth to bedrock	1.00
						Gravel content	0.74
Duffymont	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Content of large stones	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.92	Content of large stones	0.92	Depth to bedrock	1.00
						Gravel content	0.02

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
195:							
Torriorthents-------	95	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Dusty	0.50	Dusty	0.50	Content of large stones	1.00
		Content of large stones	0.14	Content of large stones	0.14	Dusty	0.50
						Gravel content	0.05
196:							
Torriorthents-------	50	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Dusty	0.50	Dusty	0.50	Content of large stones	1.00
		Content of large stones	0.14	Content of large stones	0.14	Slope	1.00
						Dusty	0.50
						Gravel content	0.05
Baston--------------	35	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
						Slope	1.00
						Depth to bedrock	0.65
197:							
Torriorthents-------	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Restricted permeability	0.41	Restricted permeability	0.41	Gravel content	1.00
		Gravel content	0.01	Gravel content	0.01	Content of large stones	0.84
						Restricted permeability	0.41
Rock outcrop, sandstone----------	30	Not rated		Not rated		Not rated	
198:							
Torriorthents-------	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Salinity	1.00	Salinity	1.00	Salinity	1.00
Rock outcrop, shale--------------	40	Not rated		Not rated		Not rated	
199:							
Torriorthents-------	60	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
Torripsamments------	30	Very limited		Very limited		Very limited	
		Too sandy	1.00	Too sandy	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Too sandy	1.00
						Depth to bedrock	0.80
						Content of large stones	0.01

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
200:							
Tresano	80	Not limited		Not limited		Very limited	
						Slope	1.00
201:							
Tresano	35	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
						Dusty	0.50
Hiatha	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	0.84	Slope	0.84	Slope	1.00
		Too clayey	0.50	Too clayey	0.50	Too clayey	0.50
		Restricted permeability	0.45	Restricted permeability	0.45	Restricted permeability	0.45
Kandaly	15	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.36	Too sandy	0.36	Slope	1.00
						Too sandy	0.36
202:							
Turzo	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Dusty	0.50	Dusty	0.50	Dusty	0.50
						Slope	0.12
203:							
Turzo, saline	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Dusty	0.50	Dusty	0.50	Slope	0.88
						Dusty	0.50
204:							
Typic Natrargids	80	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Too sandy	0.01	Too sandy	0.01	Slope	0.12
						Too sandy	0.01
205:							
Uffens	90	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Restricted permeability	0.96	Restricted permeability	0.96	Restricted permeability	0.96
		Too sandy	0.01	Too sandy	0.01	Too sandy	0.01
206:							
Ustorthents, frigid	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Gravel content	0.79	Gravel content	0.79	Gravel content	1.00
		Content of large stones	0.02	Content of large stones	0.02	Content of large stones	1.00
						Depth to bedrock	0.65
Borolls	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.96	Restricted permeability	0.96	Restricted permeability	0.96
						Depth to bedrock	0.10

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
207:							
Vermillion----------	40	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
		Dusty	0.50	Dusty	0.50	Depth to bedrock	0.65
						Dusty	0.50
Langspring----------	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
		Dusty	0.50	Dusty	0.50	Dusty	0.50
208:							
Wallson-------------	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.04	Slope	0.04	Slope	1.00
		Too sandy	0.01	Too sandy	0.01	Too sandy	0.01
Tricera-------------	35	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.58	Too sandy	0.58	Slope	1.00
		Slope	0.04	Slope	0.04	Too sandy	0.58
209:							
Weed----------------	85	Not limited		Not limited		Very limited	
						Slope	1.00
210:							
Willwood------------	55	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.86	Too sandy	0.86	Slope	1.00
						Too sandy	0.86
						Content of large stones	0.01
Sheppard, cool------	35	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.58	Too sandy	0.58	Slope	1.00
						Too sandy	0.58
211:							
Willwood------------	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.76	Too sandy	0.76	Content of large stones	1.00
		Content of large stones	0.14	Content of large stones	0.14	Gravel content	0.97
						Too sandy	0.76
Tipperary-----------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.70	Too sandy	0.70	Too sandy	0.70
212:							
Willwood------------	60	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.84	Too sandy	0.84	Slope	1.00
						Too sandy	0.84
						Content of large stones	0.01
Tipperary, cobbly substratum---------	25	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.66	Too sandy	0.66	Slope	1.00
						Too sandy	0.66

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
213:							
Winevada	60	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
						Depth to bedrock	0.84
Splitro	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	0.96	Slope	0.96	Slope	1.00
214:							
Winevada	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Depth to bedrock	0.80
Splitro	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
215:							
Winkleman	85	Very limited		Somewhat limited		Somewhat limited	
		Flooding	1.00	Restricted permeability	0.41	Restricted permeability	0.41
		Restricted permeability	0.41				
216:							
Yamo	90	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
		Slope	0.04	Slope	0.04	Dusty	0.50
217:							
Yamo	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Dusty	0.50	Dusty	0.50	Dusty	0.50
218:							
Yellowwash	50	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Salinity	1.00	Salinity	1.00	Gravel content	1.00
		Dusty	0.50	Dusty	0.50	Slope	1.00
		Gravel content	0.41	Gravel content	0.41	Salinity	1.00
		Slope	0.16	Slope	0.16	Dusty	0.50
Piezon	35	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
		Slope	0.16	Slope	0.16	Dusty	0.50
						Depth to bedrock	0.46
219:							
Youga	90	Somewhat limited		Somewhat limited		Very limited	
		Restricted permeability	0.21	Restricted permeability	0.21	Slope	1.00
		Slope	0.04	Slope	0.04	Restricted permeability	0.21
						Gravel content	0.06
220:							
Youga	50	Not limited		Not limited		Very limited	
						Slope	1.00
Dinnen	40	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.01	Too sandy	0.01	Slope	1.00
						Too sandy	0.01

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
221:							
Youga	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.02	Content of large stones	0.02	Content of large stones	1.00
						Gravel content	0.04
Gelkie	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Content of large stones	1.00
		Content of large stones	0.32	Content of large stones	0.32	Slope	1.00
						Gravel content	0.71
Clayburn, warm	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
222:							
Youngston, cool	90	Very limited		Somewhat limited		Somewhat limited	
		Flooding	1.00	Dusty	0.50	Dusty	0.50
		Dusty	0.50				
223:							
Youngston, well drained	90	Very limited		Somewhat limited		Somewhat limited	
		Flooding	1.00	Dusty	0.50	Dusty	0.50
		Dusty	0.50				
224:							
Zillion	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.13
						Content of large stones	0.03
Barkelew, moist	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Dusty	0.50	Dusty	0.50	Slope	1.00
		Gravel content	0.38	Gravel content	0.38	Content of large stones	0.99
		Restricted permeability	0.21	Restricted permeability	0.21	Dusty	0.50
		Content of large stones	0.01	Content of large stones	0.01	Restricted permeability	0.21
Grapit	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Dusty	0.50	Dusty	0.50	Gravel content	1.00
		Gravel content	0.09	Gravel content	0.09	Dusty	0.50
						Content of large stones	0.20
225:							
Abracon	45	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
						Dusty	0.50
Solirec	40	Not limited		Not limited		Very limited	
						Slope	1.00

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
226:							
Arches	45	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.57	Too sandy	0.57	Too sandy	0.57
Mespun	20	Very limited		Very limited		Very limited	
		Too sandy	1.00	Too sandy	1.00	Too sandy	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
Rock outcrop	20	Not rated		Not rated		Not rated	
227:							
Bankard family	55	Very limited		Very limited		Very limited	
		Flooding	1.00	Too sandy	1.00	Too sandy	1.00
		Too sandy	1.00			Slope	0.12
Cameo	35	Very limited		Somewhat limited		Somewhat limited	
		Flooding	1.00	Too sandy	0.31	Too sandy	0.31
		Too sandy	0.31			Slope	0.12
228:							
Bondman	50	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
Rock outcrop	35	Not rated		Not rated		Not rated	
229:							
Cameo	85	Very limited		Somewhat limited		Somewhat limited	
		Flooding	1.00	Too sandy	0.31	Too sandy	0.31
		Too sandy	0.31			Slope	0.12
230:							
Cragnot	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Gravel content	0.85	Gravel content	0.85	Gravel content	1.00
		Content of large stones	0.01	Content of large stones	0.01	Content of large stones	0.99
Pensore	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Dusty	0.50	Dusty	0.50	Gravel content	1.00
		Gravel content	0.09	Gravel content	0.09	Dusty	0.50
						Content of large stones	0.20
Grapit	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Dusty	0.50	Dusty	0.50	Gravel content	1.00
		Gravel content	0.03	Gravel content	0.03	Dusty	0.50
						Content of large stones	0.20
231:							
Green River	70	Very limited		Somewhat limited		Somewhat limited	
		Flooding	1.00	Too sandy	0.01	Too sandy	0.01
		Too sandy	0.01				

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
231:							
Fluvaquents	15	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Too sandy	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Ponding	1.00	Too sandy	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Too sandy	1.00	Flooding	0.40	Ponding	1.00
232:							
Lakebench	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.76	Too sandy	0.76	Too sandy	0.76
Strell	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.31	Too sandy	0.31	Too sandy	0.31
233:							
Lakebench	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Yampa	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.77	Content of large stones	0.77	Content of large stones	1.00
						Gravel content	0.29
234:							
Mantlemine	85	Not limited		Not limited		Somewhat limited	
						Slope	0.88
235:							
Mantlemine	55	Not limited		Not limited		Very limited	
						Slope	1.00
Emlin	30	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
						Dusty	0.50
236:							
Mido	85	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.76	Too sandy	0.76	Slope	1.00
						Too sandy	0.76
237:							
Mikim loam	55	Somewhat limited		Somewhat limited		Somewhat limited	
		Dusty	0.50	Dusty	0.50	Dusty	0.50
Mikim silt loam	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Salinity	0.50	Salinity	0.50	Salinity	0.50
		Dusty	0.50	Dusty	0.50	Dusty	0.50
						Slope	0.12
238:							
Milok	85	Not limited		Not limited		Very limited	
						Slope	1.00
239:							
Milok	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
239:							
Solirec	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Dusty	0.50	Dusty	0.50	Dusty	0.50
Strych	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Dusty	0.50	Dusty	0.50	Content of large stones	1.00
		Content of large stones	0.08	Content of large stones	0.08	Dusty	0.50
						Gravel content	0.19
240:							
Milok	70	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	0.01	Too sandy	0.01	Too sandy	0.01
Strych	20	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Gravel content	1.00
		Gravel content	0.11	Gravel content	0.11	Content of large stones	1.00
		Content of large stones	0.08	Content of large stones	0.08	Slope	1.00
241:							
Pensore	60	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Dusty	0.50	Dusty	0.50	Slope	1.00
		Gravel content	0.09	Gravel content	0.09	Dusty	0.50
						Content of large stones	0.20
Roto	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Gravel content	0.90	Gravel content	0.90	Slope	1.00
		Content of large stones	0.01	Content of large stones	0.01	Depth to bedrock	0.97
						Content of large stones	0.95
242:							
Riverwash	85	Not rated		Not rated		Not rated	
243:							
Rizno	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	0.96	Slope	0.96	Content of large stones	1.00
		Content of large stones	0.08	Content of large stones	0.08	Slope	1.00
						Gravel content	0.19
Windcomb	35	Very limited		Very limited		Very limited	
		Gravel content	1.00	Gravel content	1.00	Gravel content	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	0.96	Slope	0.96	Slope	1.00
		Dusty	0.50	Dusty	0.50	Dusty	0.50
Anasazi	15	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
						Depth to bedrock	0.90
						Content of large stones	0.08

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
244:							
Rock outcrop--------	60	Not rated		Not rated		Not rated	
Hackling----------	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Gravel content	0.09	Gravel content	0.09	Gravel content	1.00
						Content of large stones	0.20
245:							
Rock outcrop--------	30	Not rated		Not rated		Not rated	
Torriorthents-------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Gravel content	0.90	Gravel content	0.90	Depth to bedrock	1.00
		Dusty	0.50	Dusty	0.50	Content of large stones	0.95
		Content of large stones	0.01	Content of large stones	0.01	Dusty	0.50
Ustorthents---------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.05	Content of large stones	0.05	Content of large stones	1.00
						Gravel content	0.23
						Depth to bedrock	0.20
246:							
Schoonover----------	55	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Gravel content	1.00
		Gravel content	1.00	Gravel content	1.00	Depth to bedrock	1.00
		Slope	0.96	Slope	0.96	Slope	1.00
		Dusty	0.50	Dusty	0.50	Content of large stones	0.54
						Dusty	0.50
Duffymont-----------	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Content of large stones	1.00
		Content of large stones	0.98	Content of large stones	0.98	Depth to bedrock	1.00
		Slope	0.96	Slope	0.96	Slope	1.00
						Gravel content	0.47
247:							
Stout---------------	60	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
						Content of large stones	0.01
Rock outcrop--------	30	Not rated		Not rated		Not rated	
248:							
Strych--------------	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Content of large stones	1.00
		Dusty	0.50	Dusty	0.50	Slope	1.00
		Content of large stones	0.08	Content of large stones	0.08	Dusty	0.50
						Gravel content	0.19

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
248:							
Mellenthin----------	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Content of large stones	1.00
		Content of large stones	1.00	Content of large stones	1.00	Slope	1.00
		Too stony	0.53	Too stony	0.53	Too stony	0.53
						Gravel content	0.01
249:							
Zillion----------	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Content of large stones	0.03
Yampa----------	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.77	Content of large stones	0.77	Content of large stones	1.00
						Gravel content	0.29
Clyl----------	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Gravel content	1.00	Gravel content	1.00	Slope	1.00
						Content of large stones	0.01
250:							
Abracon----------	85	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
						Dusty	0.50
251:							
Badland----------	60	Not rated		Not rated		Not rated	
Renegade----------	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Content of large stones	1.00
		Content of large stones	1.00	Content of large stones	1.00	Slope	1.00
		Too sandy	0.01	Too sandy	0.01	Too sandy	0.01
						Gravel content	0.01
252:							
Bigtom----------	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Namlot----------	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Content of large stones	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Content of large stones	0.77	Content of large stones	0.77	Depth to bedrock	1.00
		Gravel content	0.04	Gravel content	0.04	Gravel content	1.00
Dokie----------	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
253:							
Clapper----------	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Gravel content	1.00
		Dusty	0.50	Dusty	0.50	Slope	1.00
		Gravel content	0.32	Gravel content	0.32	Dusty	0.50

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
254:							
Cliff	85	Not limited		Not limited		Somewhat limited	
						Slope	0.12
255:							
Clyl	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Gravel content	0.07	Gravel content	0.07	Gravel content	1.00
						Content of large stones	0.32
Pinerid	40	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Gravel content	0.85	Gravel content	0.85	Gravel content	1.00
		Content of large stones	0.01	Content of large stones	0.01	Content of large stones	0.99
256:							
Cortyzack	65	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
Diagulch	20	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.04	Slope	0.04	Slope	1.00
257:							
Cortyzack	55	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
Duffymont	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Content of large stones	1.00
		Content of large stones	0.98	Content of large stones	0.98	Depth to bedrock	1.00
		Slope	0.96	Slope	0.96	Slope	1.00
						Gravel content	0.47
258:							
Cortyzack	45	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
Flynncove	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Content of large stones	0.92
						Gravel content	0.09
259:							
Denco	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Restricted permeability	0.41	Restricted permeability	0.41	Restricted permeability	0.41
						Depth to bedrock	0.03
Gerst	40	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Dusty	0.50	Dusty	0.50	Dusty	0.50
						Content of large stones	0.01

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
260:							
Dokie	70	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Flynncove	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Content of large stones	1.00
		Content of large stones	1.00	Content of large stones	1.00	Slope	1.00
						Gravel content	0.01
261:							
Dokie	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Namlot	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Content of large stones	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Content of large stones	0.77	Content of large stones	0.77	Depth to bedrock	1.00
		Gravel content	0.04	Gravel content	0.04	Gravel content	1.00
262:							
Gompers	85	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Gravel content	1.00
		Gravel content	1.00	Gravel content	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Dusty	0.50	Dusty	0.50	Dusty	0.50
						Content of large stones	0.03
263:							
Hanksville	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
		Restricted permeability	0.45	Restricted permeability	0.45	Restricted permeability	0.45
		Salinity	0.13	Salinity	0.13	Depth to bedrock	0.20
						Salinity	0.13
264:							
Mikim	85	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
		Slope	0.04	Slope	0.04	Dusty	0.50
265:							
Mikim	85	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Salinity	0.50	Salinity	0.50	Salinity	0.50
		Dusty	0.50	Dusty	0.50	Dusty	0.50
						Slope	0.12
266:							
Rock outcrop	40	Not rated		Not rated		Not rated	
Boxring	25	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Content of large stones	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00	Depth to bedrock	1.00
						Gravel content	0.34

Table 8.-Recreation--Camp areas, picnic areas, and playgrounds--Continued

Map symbol and soil name	Pct. of map unit	Camp areas		Picnic areas		Playgrounds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
266:							
Tridell	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Content of large stones	1.00
		Content of large stones	0.77	Content of large stones	0.77	Slope	1.00
		Dusty	0.50	Dusty	0.50	Gravel content	1.00
		Gravel content	0.04	Gravel content	0.04	Dusty	0.50
267:							
Solirec	35	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.01	Too sandy	0.01	Slope	1.00
						Too sandy	0.01
Abracon	30	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
						Dusty	0.50
Begay	20	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.04	Slope	0.04	Slope	1.00
268:							
Toliver	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
Rock outcrop	30	Not rated		Not rated		Not rated	
269:							
Walknolls	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Gravel content	1.00	Gravel content	1.00	Depth to bedrock	1.00
						Content of large stones	0.84
Badland	15	Not rated		Not rated		Not rated	
Rock outcrop	10	Not rated		Not rated		Not rated	
270:							
Walknolls	55	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Gravel content	1.00
		Gravel content	1.00	Gravel content	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Dusty	0.50	Dusty	0.50	Dusty	0.50
						Content of large stones	0.03
Gilston	35	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
						Slope	0.88
						Content of large stones	0.01
271:							
Water	95	Not rated		Not rated		Not rated	

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1:							
Abor	85	Somewhat limited		Not limited		Very limited	
		Slope	0.32			Slope	1.00
						Depth to bedrock	0.03
2:							
Abor	80	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Depth to bedrock	0.03
3:							
Adderton	90	Not limited		Not limited		Not limited	
4:							
Almy	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Dusty	0.50	Dusty	0.50	Slope	0.04
5:							
Apmay	90	Not limited		Not limited		Somewhat limited	
						Depth to saturated zone	0.03
6:							
Avalon	45	Not limited		Not limited		Not limited	
Mack	45	Somewhat limited		Somewhat limited		Not limited	
		Dusty	0.50	Dusty	0.50		
7:							
Avalon	30	Somewhat limited		Somewhat limited		Not limited	
		Dusty	0.50	Dusty	0.50		
Persayo, moist	25	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.50	Dusty	0.50	Depth to bedrock	1.00
		Dusty	0.50			Droughty	1.00
						Slope	1.00
						Content of large stones	0.20
Degater	20	Very limited		Very limited		Very limited	
		Too clayey	1.00	Too clayey	1.00	Slope	1.00
		Slope	0.50			Too clayey	1.00
						Depth to bedrock	0.01
8:							
Badland	90	Not rated		Not rated		Very limited	
						Depth to bedrock	1.00
						Slope	1.00
						Droughty	1.00
						Salinity	1.00
						Too clayey	1.00
9:							
Baroid	55	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.27	Too sandy	0.27	Droughty	0.64
						Salinity	0.13

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
9:							
Eghelm	35	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.01	Too sandy	0.01	Sodium content	1.00
10:							
Battlement	85	Not limited		Not limited		Not limited	
11:							
Battlement, saline	80	Somewhat limited		Somewhat limited		Not limited	
		Dusty	0.50	Dusty	0.50		
12:							
Berlake	85	Not limited		Not limited		Not limited	
13:							
Berlake	85	Somewhat limited		Not limited		Very limited	
		Slope	0.32			Slope	1.00
14:							
Berlake	55	Not limited		Not limited		Not limited	
Maysprings	30	Not limited		Not limited		Not limited	
15:							
Berlake	35	Not limited		Not limited		Very limited	
						Slope	1.00
Taffom	30	Not limited		Not limited		Very limited	
						Slope	1.00
Gretdivid	15	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.67	Too sandy	0.67	Slope	1.00
						Droughty	0.91
						Too sandy	0.50
16:							
Bilhil	85	Not limited		Not limited		Not limited	
17:							
Binco	90	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.22	Slope	1.00
		Too stony	0.19	Too stony	0.19	Content of large stones	1.00
		Content of large stones	0.05	Content of large stones	0.05		
18:							
Boltus	50	Not limited		Not limited		Very limited	
						Depth to bedrock	1.00
						Droughty	0.73
Beamton	25	Not limited		Not limited		Somewhat limited	
						Depth to bedrock	0.20
19:							
Borollic Natrargids	40	Not limited		Not limited		Very limited	
						Sodium content	1.00

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
19:							
Borollic Haplargids	30	Not limited		Not limited		Somewhat limited	
						Slope	0.63
Ustic Torrifluvents	25	Not limited		Not limited		Not limited	
20:							
Brownsto	50	Somewhat limited		Somewhat limited		Somewhat limited	
		Dusty	0.50	Dusty	0.50	Slope	0.96
						Gravel content	0.18
						Droughty	0.02
Castee	30	Very limited		Very limited		Somewhat limited	
		Water erosion	1.00	Water erosion	1.00	Slope	0.96
		Dusty	0.50	Dusty	0.50		
21:							
Bulkley	80	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.92	Content of large stones	0.01	Slope	1.00
		Content of large stones	0.01			Content of large stones	0.95
22:							
Bulkley	80	Somewhat limited		Somewhat limited		Very limited	
		Too clayey	0.50	Too clayey	0.50	Too clayey	1.00
23:							
Bulkley	90	Somewhat limited		Somewhat limited		Very limited	
		Too clayey	0.50	Too clayey	0.50	Slope	1.00
		Slope	0.32			Too clayey	1.00
24:							
Bulkley	60	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.14	Slope	1.00
						Content of large stones	0.92
						Gravel content	0.92
Quilt	25	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.56	Slope	1.00
						Gravel content	0.22
						Content of large stones	0.01
25:							
Campspass	90	Not limited		Not limited		Not limited	
26:							
Campspass	90	Somewhat limited		Not limited		Very limited	
		Slope	0.32			Slope	1.00
27:							
Canlodore	95	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.08	Slope	1.00
						Droughty	1.00

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
28:							
Carbol	40	Not limited		Not limited		Very limited	
						Depth to bedrock	1.00
						Droughty	1.00
Irigul	25	Not limited		Not limited		Very limited	
						Depth to bedrock	1.00
						Droughty	1.00
						Slope	0.96
						Content of large stones	0.54
						Gravel content	0.04
Rock outcrop	25	Not rated		Not rated		Not rated	
29:							
Carbol	45	Not limited		Not limited		Very limited	
						Depth to bedrock	1.00
						Droughty	1.00
Miracle	30	Not limited		Not limited		Somewhat limited	
						Depth to bedrock	0.03
30:							
Carmody	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.70	Too sandy	0.70	Depth to bedrock	0.95
						Droughty	0.49
						Slope	0.37
Rock River	30	Not limited		Not limited		Somewhat limited	
						Slope	0.37
Crestman	20	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.70	Too sandy	0.70	Depth to bedrock	1.00
						Droughty	1.00
						Slope	0.37
31:							
Castee	90	Somewhat limited		Somewhat limited		Not limited	
		Dusty	0.50	Dusty	0.50		
32:							
Chroder	80	Not limited		Not limited		Not limited	
33:							
Clayburn, warm	85	Not limited		Not limited		Somewhat limited	
						Slope	0.96
34:							
Clayburn	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Content of large stones	0.01
Foidel	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
35:							
Clayburn	45	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.22	Slope	1.00

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
35:							
Youga, moist--------	35	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.22	Slope	1.00
36:							
Clifsand----------	60	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.79	Too sandy	0.79	Droughty	0.20
						Content of large stones	0.01
Chroder----------	30	Somewhat limited		Somewhat limited		Not limited	
		Too sandy	0.75	Too sandy	0.75		
37:							
Cochetopa----------	85	Somewhat limited		Not limited		Very limited	
		Slope	0.32			Slope	1.00
38:							
Cochetopa----------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
39:							
Cochetopa, warm-----	85	Not limited		Not limited		Not limited	
40:							
Cochetopa----------	45	Not limited		Not limited		Somewhat limited	
						Slope	0.84
Gothic----------	40	Somewhat limited		Somewhat limited		Very limited	
		Content of large stones	0.68	Content of large stones	0.68	Slope	1.00
		Slope	0.50			Content of large stones	1.00
41:							
Cochetopa----------	40	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.78	Slope	1.00
		Content of large stones	0.14	Content of large stones	0.14	Content of large stones	1.00
Gothic----------	35	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.78	Slope	1.00
						Content of large stones	0.54
42:							
Cochetopa----------	50	Not limited		Not limited		Somewhat limited	
						Slope	0.04
Jerry----------	35	Somewhat limited		Somewhat limited		Very limited	
		Content of large stones	0.10	Content of large stones	0.10	Content of large stones	1.00
						Slope	0.04
43:							
Coldspring, moist---	80	Not limited		Not limited		Not limited	
44:							
Cowestglen----------	80	Not limited		Not limited		Not limited	

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
45:							
Coyet	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.72	Too sandy	0.72	Droughty	0.07
46:							
Coyet	85	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.72	Too sandy	0.72	Slope	1.00
		Slope	0.32			Droughty	0.07
47:							
Coyet	45	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.78	Slope	1.00
		Too sandy	0.72	Too sandy	0.72	Droughty	0.14
Crestman, moist	35	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.78	Depth to bedrock	1.00
		Too sandy	0.70	Too sandy	0.70	Slope	1.00
						Droughty	1.00
48:							
Crago	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Dusty	0.50	Dusty	0.50	Carbonate content	1.00
		Content of large stones	0.02	Content of large stones	0.02	Content of large stones	1.00
						Droughty	0.66
						Gravel content	0.01
Pensore	35	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Dusty	0.50	Depth to bedrock	1.00
		Dusty	0.50	Slope	0.01	Droughty	1.00
						Slope	1.00
						Carbonate content	1.00
						Gravel content	0.22
Grapit	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Dusty	0.50	Dusty	0.50	Carbonate content	1.00
						Content of large stones	0.20
						Gravel content	0.09
49:							
Cryoborolls, slumped	85	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.56	Slope	1.00
						Content of large stones	0.08
50:							
Cushool	85	Not limited		Not limited		Somewhat limited	
						Depth to bedrock	0.84
						Droughty	0.02
51:							
Cushool	85	Somewhat limited		Not limited		Very limited	
		Slope	0.32			Slope	1.00
						Depth to bedrock	0.84
						Droughty	0.02

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
52:							
Danavore	45	Somewhat limited		Somewhat limited		Very limited	
		Content of large stones	0.71	Content of large stones	0.71	Content of large stones	1.00
		Slope	0.18			Droughty	1.00
						Slope	1.00
						Depth to bedrock	0.97
Waybe	30	Somewhat limited		Not limited		Very limited	
		Slope	0.18			Depth to bedrock	1.00
						Slope	1.00
						Droughty	0.99
						Content of large stones	0.03
						Gravel content	0.02
53:							
Davtone	45	Somewhat limited		Not limited		Very limited	
		Slope	0.98			Slope	1.00
Forsey	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.98	Content of large stones	0.03	Content of large stones	1.00
		Content of large stones	0.03			Slope	1.00
						Droughty	0.62
54:							
Deaver	50	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.22	Slope	1.00
						Depth to bedrock	0.46
						Content of large stones	0.03
						Gravel content	0.02
Avalon	30	Very limited		Very limited		Somewhat limited	
		Water erosion	1.00	Water erosion	1.00	Slope	0.04
		Dusty	0.50	Dusty	0.50		
55:							
Deaver	60	Somewhat limited		Not limited		Very limited	
		Slope	0.32			Slope	1.00
						Depth to bedrock	0.10
Chipeta	30	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Depth to bedrock	1.00
		Slope	0.32			Slope	1.00
						Droughty	0.71
56:							
Debone	90	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Sodium content	1.00
						Droughty	0.01
57:							
Detra	50	Not limited		Not limited		Not limited	
Cortyzack	40	Not limited		Not limited		Not limited	

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
58:							
Diaflats	45	Very limited		Very limited		Somewhat limited	
		Water erosion	1.00	Water erosion	1.00	Depth to bedrock	0.80
		Dusty	0.50	Dusty	0.50	Slope	0.04
Fondillas	35	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Depth to bedrock	1.00
		Dusty	0.50	Dusty	0.50	Droughty	1.00
						Slope	0.04
59:							
Dranyon	90	Not limited		Not limited		Somewhat limited	
						Slope	0.63
60:							
Dumps, mine	100	Not rated		Not rated		Not rated	
61:							
Ecklund	50	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.70	Too sandy	0.70	Droughty	0.70
						Depth to bedrock	0.06
Tipperary	40	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.70	Too sandy	0.70	Droughty	0.29
62:							
Eghelm	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.58	Too sandy	0.58	Droughty	0.01
63:							
Eghelm, moist	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.60	Too sandy	0.60	Droughty	0.02
64:							
Emlin	85	Somewhat limited		Somewhat limited		Not limited	
		Dusty	0.50	Dusty	0.50		
65:							
Emlin	65	Somewhat limited		Somewhat limited		Not limited	
		Dusty	0.50	Dusty	0.50		
Tymosling	20	Not limited		Not limited		Very limited	
						Gravel content	1.00
						Slope	0.16
						Content of large stones	0.11
						Depth to bedrock	0.10
66:							
Evanot	90	Somewhat limited		Somewhat limited		Not limited	
		Dusty	0.50	Dusty	0.50		
67:							
Evanot	85	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
		Slope	0.32				
68:							
Evanot	50	Somewhat limited		Somewhat limited		Somewhat limited	
		Dusty	0.50	Dusty	0.50	Slope	0.63

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
68:							
Yamo	25	Somewhat limited		Somewhat limited		Somewhat limited	
		Dusty	0.50	Dusty	0.50	Slope	0.63
69:							
Fenster	45	Somewhat limited		Somewhat limited		Not limited	
		Dusty	0.50	Dusty	0.50		
Thenipel	30	Somewhat limited		Somewhat limited		Not limited	
		Dusty	0.50	Dusty	0.50		
70:							
Fluvaquents, frequently flooded	50	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Flooding	0.40	Flooding	0.40	Depth to saturated zone	1.00
						Content of large stones	0.03
Haplaquolls, frequently flooded	45	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Flooding	0.40	Flooding	0.40	Depth to saturated zone	1.00
71:							
Flygare, dry	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
72:							
Foidel, cool	85	Not limited		Not limited		Somewhat limited	
						Slope	0.96
73:							
Foidel	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
74:							
Foidel, moist	35	Not limited		Not limited		Somewhat limited	
						Slope	0.96
Flygare	30	Not limited		Not limited		Somewhat limited	
						Slope	0.96
Skyway, moist	20	Not limited		Not limited		Somewhat limited	
						Slope	0.96
						Depth to bedrock	0.35
						Droughty	0.01
						Content of large stones	0.01
75:							
Fonce	90	Not limited		Not limited		Somewhat limited	
						Droughty	0.24

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
76:							
Fonce	90	Not limited		Not limited		Somewhat limited	
						Droughty	0.11
						Gravel content	0.03
						Content of large stones	0.01
77:							
Forelle	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Dusty	0.50	Dusty	0.50	Content of large stones	0.03
78:							
Forelle	85	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Dusty	0.50	Dusty	0.50	Content of large stones	0.03
		Slope	0.32				
79:							
Forelle	50	Somewhat limited		Somewhat limited		Somewhat limited	
		Dusty	0.50	Dusty	0.50	Content of large stones	0.03
Evanot	40	Somewhat limited		Somewhat limited		Not limited	
		Dusty	0.50	Dusty	0.50		
80:							
Forelle	50	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Dusty	0.50	Dusty	0.50	Content of large stones	0.03
		Slope	0.32				
Evanot	40	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
		Slope	0.32				
81:							
Forelle	40	Somewhat limited		Somewhat limited		Somewhat limited	
		Dusty	0.50	Dusty	0.50	Content of large stones	0.03
Obadia	35	Not limited		Not limited		Very limited	
						Sodium content	1.00
82:							
Forelle	30	Very limited		Very limited		Somewhat limited	
		Water erosion	1.00	Water erosion	1.00	Slope	0.84
		Dusty	0.50	Dusty	0.50	Content of large stones	0.03
Pinelli	30	Very limited		Very limited		Somewhat limited	
		Water erosion	1.00	Water erosion	1.00	Slope	0.84
		Dusty	0.50	Dusty	0.50		
Maysprings	15	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.67	Too sandy	0.67	Slope	0.84
						Too sandy	0.50
						Droughty	0.17

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
83:							
Forsey	50	Somewhat limited		Somewhat limited		Very limited	
		Content of large stones	0.03	Content of large stones	0.03	Content of large stones	1.00
						Slope	0.96
						Droughty	0.62
Libeg	30	Not limited		Not limited		Somewhat limited	
						Slope	0.04
84:							
Gebson, moist	55	Somewhat limited		Somewhat limited		Very limited	
		Content of large stones	0.77	Content of large stones	0.77	Content of large stones	1.00
						Slope	1.00
Youga	35	Not limited		Not limited		Somewhat limited	
						Slope	0.16
85:							
Giarch	90	Not limited		Not limited		Very limited	
						Sodium content	1.00
86:							
Gracot	50	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.60	Too sandy	0.60	Slope	1.00
		Slope	0.18			Gravel content	1.00
						Droughty	0.95
						Content of large stones	0.54
Maybell	30	Very limited		Very limited		Very limited	
		Too sandy	1.00	Too sandy	1.00	Slope	1.00
		Slope	0.18			Too sandy	0.50
						Droughty	0.23
87:							
Gretdivid	35	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.67	Too sandy	0.67	Slope	1.00
		Slope	0.50			Droughty	0.91
						Too sandy	0.50
Taffom	25	Somewhat limited		Not limited		Very limited	
		Slope	0.50			Slope	1.00
Abor	15	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.50	Too clayey	0.50	Slope	1.00
		Too clayey	0.50			Too clayey	1.00
						Depth to bedrock	0.46
88:							
Grieves	85	Somewhat limited		Somewhat limited		Not limited	
		Too sandy	0.70	Too sandy	0.70		
89:							
Grieves	85	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.70	Too sandy	0.70	Slope	1.00
		Slope	0.32				

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
90:							
Grieves	45	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.70	Too sandy	0.70	Slope	1.00
		Slope	0.50				
Crestman	35	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Too sandy	0.70	Depth to bedrock	1.00
		Too sandy	0.70	Slope	0.08	Slope	1.00
						Droughty	1.00
91:							
Grieves	40	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.70	Too sandy	0.70	Slope	1.00
Yamo	25	Not limited		Not limited		Somewhat limited	
						Slope	0.04
Crestman	20	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Too sandy	0.70	Depth to bedrock	1.00
		Too sandy	0.70	Slope	0.22	Slope	1.00
						Droughty	1.00
92:							
Grimm	50	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Too sandy	0.78	Slope	1.00
		Too sandy	0.78	Content of large stones	0.32	Content of large stones	1.00
		Content of large stones	0.32	Slope	0.22	Droughty	1.00
						Gravel content	0.37
Ustic Torriorthents, shallow	40	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Content of large stones	0.35	Depth to bedrock	1.00
		Content of large stones	0.35	Slope	0.22	Slope	1.00
						Content of large stones	1.00
						Droughty	1.00
						Gravel content	0.01
93:							
Gullied land	85	Not rated		Not rated		Not rated	
94:							
Hapney, moist	90	Not limited		Not limited		Very limited	
						Sodium content	1.00
95:							
Haterton	60	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Depth to bedrock	1.00
						Droughty	0.98
Piezon	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Dusty	0.50	Dusty	0.50	Depth to bedrock	0.95
96:							
Heathcoat	85	Somewhat limited		Somewhat limited		Very limited	
		Content of large stones	0.05	Content of large stones	0.05	Content of large stones	1.00

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
97:							
Heathcoat	60	Not limited		Not limited		Somewhat limited	
						Slope	0.84
Clayburn	25	Somewhat limited		Not limited		Very limited	
		Slope	0.50			Slope	1.00
98:							
Herm	50	Somewhat limited		Somewhat limited		Very limited	
		Content of large stones	0.01	Content of large stones	0.01	Slope	1.00
						Content of large stones	0.99
Fughes	35	Somewhat limited		Somewhat limited		Very limited	
		Content of large stones	0.14	Content of large stones	0.14	Content of large stones	1.00
						Slope	1.00
99:							
Hesperus, dry	85	Not limited		Not limited		Somewhat limited	
						Slope	0.04
100:							
Hesperus	90	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.56	Slope	1.00
101:							
Hesperus	90	Not limited		Not limited		Somewhat limited	
						Slope	0.96
102:							
Holter	55	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.18	Content of large stones	0.08	Content of large stones	1.00
		Content of large stones	0.08			Slope	1.00
						Droughty	0.26
Detra	30	Not limited		Not limited		Not limited	
103:							
Iles	85	Not limited		Not limited		Not limited	
104:							
Ironco	60	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.96	Slope	1.00
		Content of large stones	0.77	Content of large stones	0.77	Content of large stones	1.00
						Droughty	0.42
Mulgon, dry	25	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.96	Slope	1.00
						Droughty	0.56
105:							
Ironsprings	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.79	Too sandy	0.79	Droughty	0.02
106:							
Ironsprings	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.92	Too sandy	0.79	Slope	1.00
		Too sandy	0.79			Droughty	0.02

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
107:							
Ironsprings---	40	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.67	Too sandy	0.67	Slope	1.00
						Too sandy	0.50
						Droughty	0.06
Maysprings---	25	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.67	Too sandy	0.67	Slope	1.00
						Too sandy	0.50
Gretdivid---	15	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.67	Too sandy	0.67	Slope	1.00
						Droughty	0.91
						Too sandy	0.50
108:							
Jerry---	50	Somewhat limited		Not limited		Very limited	
		Slope	0.50			Slope	1.00
Cochetopa---	35	Somewhat limited		Not limited		Very limited	
		Slope	0.50			Slope	1.00
109:							
Joebas---	60	Not limited		Not limited		Very limited	
						Depth to bedrock	1.00
						Droughty	1.00
						Slope	1.00
						Content of large stones	0.08
						Gravel content	0.01
Rock outcrop---	30	Not rated		Not rated		Not rated	
110:							
Kemmerer---	80	Somewhat limited		Not limited		Very limited	
		Slope	0.32			Slope	1.00
						Depth to bedrock	0.97
						Droughty	0.06
111:							
Kemmerer---	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	1.00
						Depth to bedrock	0.74
						Content of large stones	0.20
						Droughty	0.05
Grapit---	35	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Content of large stones	0.26	Slope	1.00
		Content of large stones	0.26	Slope	0.22	Content of large stones	1.00
						Carbonate content	1.00
						Gravel content	0.04
						Droughty	0.02
112:							
Kemmerer---	45	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.22	Slope	1.00
						Depth to bedrock	0.97
						Droughty	0.06

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
112:							
Moyerson	40	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.22	Depth to bedrock	1.00
						Slope	1.00
						Droughty	0.96
113:							
Kemmerer	60	Somewhat limited		Not limited		Very limited	
		Slope	0.18			Slope	1.00
						Depth to bedrock	0.97
						Droughty	0.06
Yamo	20	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Slope	1.00
		Slope	0.18				
114:							
Lamphier	85	Not limited		Not limited		Somewhat limited	
						Slope	0.96
115:							
Lamphier	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
116:							
Lamphier	45	Not limited		Not limited		Somewhat limited	
						Slope	0.96
Jerry	30	Not limited		Not limited		Somewhat limited	
						Slope	0.96
117:							
Lamphier	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Jerry	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
118:							
Lander	85	Not limited		Not limited		Not limited	
119:							
Langspring	85	Not limited		Not limited		Not limited	
120:							
Layoint	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.76	Too sandy	0.76	Depth to bedrock	0.29
						Droughty	0.11
Moosed	25	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.27	Too sandy	0.27	Depth to bedrock	1.00
						Droughty	1.00
						Slope	0.37
Berlake	20	Not limited		Not limited		Not limited	
121:							
Leaps	90	Not limited		Not limited		Somewhat limited	
						Slope	0.04

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
122:							
Leswill	50	Not limited		Not limited		Very limited	
						Sodium content	1.00
Rogrube	30	Somewhat limited		Somewhat limited		Not limited	
		Dusty	0.50	Dusty	0.50		
123:							
Lilsnake	45	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Depth to bedrock	1.00
		Dusty	0.50	Dusty	0.50	Slope	0.63
						Droughty	0.60
Sandwash	30	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Carbonate content	1.00
						Depth to bedrock	0.10
						Droughty	0.06
124:							
Losee	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.26	Content of large stones	0.26	Content of large stones	1.00
						Droughty	0.26
Thornburgh, dry	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.88	Content of large stones	0.88	Content of large stones	1.00
						Droughty	0.60
125:							
Massadona	85	Not limited		Not limited		Not limited	
126:							
Massadona	65	Somewhat limited		Somewhat limited		Not limited	
		Dusty	0.50	Dusty	0.50		
Youngston, moist	20	Somewhat limited		Somewhat limited		Not limited	
		Dusty	0.50	Dusty	0.50		
127:							
Maudlin	50	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.01	Too sandy	0.01	Depth to bedrock	0.46
						Slope	0.04
Duffymont	30	Somewhat limited		Somewhat limited		Very limited	
		Content of large stones	0.92	Content of large stones	0.92	Depth to bedrock	1.00
						Content of large stones	1.00
						Droughty	1.00
						Slope	0.04
128:							
Maybell	90	Very limited		Very limited		Somewhat limited	
		Too sandy	1.00	Too sandy	1.00	Too sandy	0.50
						Droughty	0.19

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
129:							
Maybell	90	Very limited		Very limited		Very limited	
		Too sandy	1.00	Too sandy	1.00	Slope	1.00
		Slope	1.00	Slope	0.14	Too sandy	0.50
						Droughty	0.23
130:							
Maysprings	85	Not limited		Not limited		Not limited	
131:							
Maysprings	50	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.67	Too sandy	0.67	Slope	1.00
						Too sandy	0.50
Gretdivid	30	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.67	Too sandy	0.67	Slope	1.00
						Droughty	0.91
						Too sandy	0.50
132:							
Milren	80	Not limited		Not limited		Not limited	
133:							
Miracle	50	Not limited		Not limited		Somewhat limited	
						Depth to bedrock	0.03
Coldspring	30	Not limited		Not limited		Not limited	
134:							
Morapos	85	Not limited		Not limited		Not limited	
135:							
Morapos	85	Somewhat limited		Not limited		Very limited	
		Slope	0.32			Slope	1.00
136:							
Morapos	40	Not limited		Not limited		Not limited	
Pagoda	40	Not limited		Not limited		Not limited	
137:							
Morset	50	Not limited		Not limited		Not limited	
Youga	30	Not limited		Not limited		Not limited	
138:							
Moyerson	50	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.22	Depth to bedrock	1.00
						Slope	1.00
						Droughty	0.96
Rentsac	30	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.22	Depth to bedrock	1.00
						Slope	1.00
						Droughty	1.00
						Content of large stones	0.54
						Gravel content	0.04

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
139:							
Muggins	85	Not limited		Not limited		Somewhat limited	
						Slope	0.63
140:							
Ninot	50	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Dusty	0.50	Slope	1.00
		Dusty	0.50	Slope	0.22	Gravel content	1.00
						Content of large stones	0.01
Crago	20	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Dusty	0.50	Slope	1.00
		Dusty	0.50	Slope	0.22	Carbonate content	1.00
		Content of large stones	0.02	Content of large stones	0.02	Content of large stones	1.00
						Droughty	0.63
						Gravel content	0.01
Garlips	15	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.22	Slope	1.00
141:							
Nortez, cool	50	Not limited		Not limited		Somewhat limited	
						Depth to bedrock	0.46
Morapos	40	Not limited		Not limited		Not limited	
142:							
Nortez, cool	50	Somewhat limited		Not limited		Very limited	
		Slope	0.32			Slope	1.00
						Depth to bedrock	0.46
Morapos	40	Somewhat limited		Not limited		Very limited	
		Slope	0.32			Slope	1.00
143:							
Nunemaker	90	Not limited		Not limited		Very limited	
						Sodium content	1.00
144:							
Pagoda	85	Somewhat limited		Not limited		Very limited	
		Slope	0.32			Slope	1.00
145:							
Pagoda	85	Not limited		Not limited		Not limited	
146:							
Pavillion	60	Very limited		Very limited		Somewhat limited	
		Water erosion	1.00	Water erosion	1.00	Slope	0.63
		Dusty	0.50	Dusty	0.50	Depth to bedrock	0.06
Degater	25	Very limited		Very limited		Very limited	
		Too clayey	1.00	Too clayey	1.00	Gravel content	1.00
						Too clayey	1.00
						Slope	0.63
						Depth to bedrock	0.46
						Content of large stones	0.01

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
147:							
Peeler----------	85	Not limited		Not limited		Very limited	
						Slope	1.00
148:							
Pilotpeak----------	45	Not limited		Not limited		Very limited	
						Depth to bedrock	1.00
						Droughty	1.00
						Gravel content	0.50
Grubrob----------	35	Not limited		Not limited		Somewhat limited	
						Depth to bedrock	0.65
						Droughty	0.10
149:							
Pinelli----------	85	Somewhat limited		Somewhat limited		Not limited	
		Dusty	0.50	Dusty	0.50		
150:							
Pinelli----------	85	Not limited		Not limited		Somewhat limited	
						Slope	0.04
151:							
Pinelli, dry--------	85	Somewhat limited		Somewhat limited		Not limited	
		Dusty	0.50	Dusty	0.50		
152:							
Pinridge----------	85	Not limited		Not limited		Not limited	
153:							
Pricecreek----------	85	Not limited		Not limited		Not limited	
154:							
Quealman----------	90	Very limited		Very limited		Somewhat limited	
		Too sandy	1.00	Too sandy	1.00	Flooding	0.60
						Too sandy	0.50
155:							
Rencot----------	50	Somewhat limited		Somewhat limited		Very limited	
		Content of large stones	0.77	Content of large stones	0.77	Depth to bedrock	1.00
						Content of large stones	1.00
		Dusty	0.50	Dusty	0.50		
						Droughty	1.00
						Slope	0.84
						Gravel content	0.01
Duffymont----------	30	Somewhat limited		Somewhat limited		Very limited	
		Content of large stones	0.92	Content of large stones	0.92	Depth to bedrock	1.00
						Content of large stones	1.00
						Droughty	1.00
						Slope	0.84
156:							
Rentsac----------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
						Slope	1.00
						Droughty	1.00
						Content of large stones	0.54
						Gravel content	0.04

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
157:							
Rentsac	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
						Slope	1.00
						Droughty	1.00
						Gravel content	0.95
						Content of large stones	0.84
Moyerson	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
						Slope	1.00
						Droughty	0.97
						Content of large stones	0.32
						Gravel content	0.07
158:							
Rock outcrop	70	Not rated		Not rated		Not rated	
Earsman	20	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Too sandy	0.72	Depth to bedrock	1.00
		Too sandy	0.72	Content of large stones	0.68	Content of large stones	1.00
		Content of large stones	0.68	Slope	0.08	Droughty	1.00
						Slope	1.00
159:							
Rock outcrop	50	Not rated		Not rated		Not rated	
Haploborolls	35	Very limited		Not limited		Very limited	
		Slope	1.00			Slope	1.00
						Depth to bedrock	0.90
						Droughty	0.77
						Gravel content	0.16
						Content of large stones	0.03
160:							
Rock outcrop	70	Not rated		Not rated		Not rated	
Torriorthents	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
						Slope	1.00
						Droughty	1.00
						Content of large stones	0.84
						Gravel content	0.01
161:							
Rock River	85	Not limited		Not limited		Not limited	
162:							
Rock River	85	Not limited		Not limited		Not limited	
163:							
Rock River	85	Somewhat limited		Not limited		Very limited	
		Slope	0.32			Slope	1.00

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
164:							
Rock River----------	50	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.66	Too sandy	0.66	Slope	0.63
Taffom----------	25	Not limited		Not limited		Somewhat limited	
						Slope	0.63
165:							
Rogrube sandy loam----------	50	Not limited		Not limited		Not limited	
Rogrube clay loam----------	25	Not limited		Not limited		Not limited	
166:							
Routt----------	80	Not limited		Not limited		Somewhat limited	
						Slope	0.96
167:							
Routt----------	30	Somewhat limited		Not limited		Very limited	
		Slope	0.50			Slope	1.00
Cochetopa----------	25	Somewhat limited		Not limited		Very limited	
		Slope	0.50			Slope	1.00
Binco----------	20	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.50	Content of large stones	0.05	Content of large stones	1.00
		Content of large stones	0.05			Slope	1.00
168:							
Ruedloff----------	85	Not limited		Not limited		Somewhat limited	
						Droughty	0.29
169:							
Ruedloff----------	60	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.67	Too sandy	0.67	Slope	1.00
						Too sandy	0.50
						Droughty	0.21
Dunul----------	30	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.67	Too sandy	0.67	Droughty	1.00
						Slope	1.00
						Gravel content	0.55
						Too sandy	0.50
						Content of large stones	0.32
170:							
Ryan Park----------	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.79	Too sandy	0.79	Slope	0.04
171:							
Ryan Park----------	85	Not limited		Not limited		Not limited	
172:							
Ryan Park----------	50	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.79	Too sandy	0.79	Slope	1.00

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
172:							
Coyet	30	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.72	Too sandy	0.72	Slope	1.00
						Droughty	0.07
173:							
Ryark	65	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.79	Too sandy	0.79	Droughty	0.20
						Slope	0.04
Powderwash	20	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.76	Too sandy	0.76	Slope	0.04
						Depth to bedrock	0.01
174:							
Ryark	70	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.79	Too sandy	0.79	Droughty	0.20
Maybell	15	Very limited		Very limited		Somewhat limited	
		Too sandy	1.00	Too sandy	1.00	Too sandy	0.50
						Droughty	0.19
175:							
Sandwash	40	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Carbonate content	1.00
						Depth to bedrock	0.97
						Droughty	0.64
Langspring	30	Not limited		Not limited		Not limited	
Baston	20	Not limited		Not limited		Very limited	
						Sodium content	1.00
						Depth to bedrock	0.65
						Droughty	0.20
176:							
Schooner	50	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Too sandy	0.33	Depth to bedrock	1.00
		Too sandy	0.33			Droughty	1.00
						Slope	1.00
Rock outcrop	35	Not rated		Not rated		Not rated	
177:							
Schooner	55	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.33	Too sandy	0.33	Depth to bedrock	1.00
						Droughty	1.00
						Slope	1.00
Tricera	25	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.60	Too sandy	0.60	Slope	0.16
						Droughty	0.13
178:							
Simanni	50	Not limited		Not limited		Not limited	
Ruedloff	40	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.67	Too sandy	0.67	Too sandy	0.50
						Droughty	0.21

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
179:							
Skyway, dry---------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Depth to bedrock	0.35
						Droughty	0.01
						Content of large stones	0.01
180:							
Spool---------------	55	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.92	Too sandy	0.70	Depth to bedrock	1.00
		Too sandy	0.70			Droughty	1.00
						Slope	1.00
						Content of large stones	0.01
Maybell-------------	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.79	Too sandy	0.79	Slope	0.16
						Droughty	0.13
181:							
Stunner-------------	90	Not limited		Not limited		Not limited	
182:							
Stunner, moist------	55	Somewhat limited		Somewhat limited		Not limited	
		Dusty	0.50	Dusty	0.50		
Emlin---------------	35	Somewhat limited		Somewhat limited		Not limited	
		Dusty	0.50	Dusty	0.50		
183:							
Styers--------------	45	Somewhat limited		Somewhat limited		Very limited	
		Too clayey	0.50	Too clayey	0.50	Slope	1.00
						Too clayey	1.00
						Depth to bedrock	0.10
Ironsprings---------	25	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.67	Too sandy	0.67	Slope	1.00
						Too sandy	0.50
						Droughty	0.06
Maysprings----------	15	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.67	Too sandy	0.67	Slope	1.00
						Too sandy	0.50
						Droughty	0.04
184:							
Styers--------------	40	Somewhat limited		Not limited		Very limited	
		Slope	0.18			Slope	1.00
						Depth to bedrock	0.65
Pinelli-------------	20	Somewhat limited		Not limited		Very limited	
		Slope	0.18			Slope	1.00
Taffom--------------	15	Somewhat limited		Not limited		Very limited	
		Slope	0.18			Slope	1.00
185:							
Taffom--------------	85	Not limited		Not limited		Somewhat limited	
						Slope	0.04

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
186:							
Talamantes----------	85	Somewhat limited		Somewhat limited		Not limited	
		Dusty	0.50	Dusty	0.50		
187:							
Talamantes----------	90	Very limited		Very limited		Somewhat limited	
		Water erosion	1.00	Water erosion	1.00	Slope	0.37
		Dusty	0.50	Dusty	0.50		
188:							
Talamantes, saline----------	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Dusty	0.50	Dusty	0.50	Salinity	0.50
189:							
Tipper----------	55	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Too sandy	0.70	Droughty	1.00
		Too sandy	0.70			Slope	1.00
						Depth to bedrock	0.65
Crustown----------	35	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Too sandy	0.70	Depth to bedrock	1.00
		Too sandy	0.70			Droughty	1.00
190:							
Tipperary----------	90	Very limited		Very limited		Somewhat limited	
		Too sandy	1.00	Too sandy	1.00	Slope	0.84
						Too sandy	0.50
						Droughty	0.36
191:							
Tipperary----------	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.70	Too sandy	0.70	Droughty	0.29
192:							
Tipperary----------	50	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.70	Too sandy	0.70	Droughty	0.29
Willwood----------	40	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.84	Too sandy	0.84	Droughty	1.00
						Content of large stones	0.01
193:							
Tisworth----------	85	Not limited		Not limited		Very limited	
						Sodium content	1.00
						Droughty	0.06
194:							
Tolman----------	50	Somewhat limited		Somewhat limited		Very limited	
		Content of large stones	0.54	Content of large stones	0.54	Depth to bedrock	1.00
		Slope	0.50			Content of large stones	1.00
						Droughty	1.00
						Slope	1.00

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
194:							
Duffymont	35	Somewhat limited		Somewhat limited		Very limited	
		Content of large stones	0.92	Content of large stones	0.92	Depth to bedrock	1.00
		Slope	0.50			Content of large stones	1.00
						Droughty	1.00
						Slope	1.00
195:							
Torriorthents	95	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Depth to bedrock	1.00
		Slope	0.32	Content of large stones	0.14	Droughty	1.00
		Content of large stones	0.14			Slope	1.00
						Content of large stones	1.00
196:							
Torriorthents	50	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Depth to bedrock	1.00
		Content of large stones	0.14	Content of large stones	0.14	Droughty	1.00
						Content of large stones	1.00
Baston	35	Not limited		Not limited		Very limited	
						Sodium content	1.00
						Depth to bedrock	0.65
						Droughty	0.20
197:							
Torriorthents	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
						Slope	1.00
						Droughty	1.00
						Content of large stones	0.84
						Gravel content	0.01
Rock outcrop, sandstone	30	Not rated		Not rated		Not rated	
198:							
Torriorthents	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
						Slope	1.00
						Droughty	1.00
						Salinity	1.00
Rock outcrop, shale	40	Not rated		Not rated		Not rated	
199:							
Torriorthents	60	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.01	Depth to bedrock	1.00
						Slope	1.00
						Droughty	1.00

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
199:							
Torripsamments	30	Very limited		Very limited		Very limited	
		Too sandy	1.00	Too sandy	1.00	Droughty	1.00
		Slope	1.00	Slope	0.01	Slope	1.00
						Depth to bedrock	0.80
						Too sandy	0.50
						Content of large stones	0.01
200:							
Tresano	80	Not limited		Not limited		Not limited	
201:							
Tresano	35	Somewhat limited		Somewhat limited		Not limited	
		Dusty	0.50	Dusty	0.50		
Hiatha	30	Somewhat limited		Somewhat limited		Very limited	
		Too clayey	0.50	Too clayey	0.50	Depth to bedrock	1.00
						Too clayey	1.00
						Droughty	0.98
						Slope	0.84
Kandaly	15	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.36	Too sandy	0.36	Droughty	0.91
202:							
Turzo	90	Somewhat limited		Somewhat limited		Not limited	
		Dusty	0.50	Dusty	0.50		
203:							
Turzo, saline	90	Somewhat limited		Somewhat limited		Not limited	
		Dusty	0.50	Dusty	0.50		
204:							
Typic Natrargids	80	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.01	Too sandy	0.01	Sodium content	1.00
205:							
Uffens	90	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.01	Too sandy	0.01	Sodium content	1.00
206:							
Ustorthents, frigid	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.02	Content of large stones	0.02	Content of large stones	1.00
						Droughty	0.88
						Gravel content	0.79
						Depth to bedrock	0.65
Borolls	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Depth to bedrock	0.10
207:							
Vermillion	40	Very limited		Very limited		Somewhat limited	
		Water erosion	1.00	Water erosion	1.00	Slope	0.96
		Dusty	0.50	Dusty	0.50	Depth to bedrock	0.65
						Droughty	0.22

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
207:							
Langspring----------	35	Very limited		Very limited		Somewhat limited	
		Water erosion	1.00	Water erosion	1.00	Slope	0.96
		Dusty	0.50	Dusty	0.50		
208:							
Wallson------------	50	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.01	Too sandy	0.01	Slope	0.04
Tricera------------	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.58	Too sandy	0.58	Droughty	0.08
						Slope	0.04
209:							
Weed----------------	85	Not limited		Not limited		Not limited	
210:							
Willwood-----------	55	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.86	Too sandy	0.86	Droughty	1.00
						Content of large stones	0.01
Sheppard, cool------	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.58	Too sandy	0.58	Droughty	0.08
211:							
Willwood-----------	55	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Too sandy	0.76	Droughty	1.00
		Too sandy	0.76	Content of large stones	0.14	Content of large stones	1.00
		Content of large stones	0.14	Slope	0.01	Slope	1.00
Tipperary----------	35	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Too sandy	0.70	Slope	1.00
		Too sandy	0.70	Slope	0.01	Droughty	0.29
212:							
Willwood-----------	60	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.84	Too sandy	0.84	Droughty	1.00
						Content of large stones	0.01
Tipperary, cobbly substratum---------	25	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.66	Too sandy	0.66	Droughty	0.14
213:							
Winevada-----------	60	Not limited		Not limited		Somewhat limited	
						Slope	0.96
						Depth to bedrock	0.84
Splitro------------	30	Not limited		Not limited		Very limited	
						Depth to bedrock	1.00
						Droughty	1.00
						Slope	0.96
214:							
Winevada-----------	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Depth to bedrock	0.80

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
214:							
Splitro	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
						Slope	1.00
						Droughty	1.00
215:							
Winkleman	85	Not limited		Not limited		Not limited	
216:							
Yamo	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Dusty	0.50	Dusty	0.50	Slope	0.04
217:							
Yamo	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.92	Dusty	0.50	Slope	1.00
		Dusty	0.50				
218:							
Yellowwash	50	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Depth to bedrock	1.00
						Droughty	1.00
						Salinity	1.00
						Gravel content	0.41
						Slope	0.16
Piezon	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Dusty	0.50	Dusty	0.50	Depth to bedrock	0.46
						Slope	0.16
219:							
Youga	90	Not limited		Not limited		Somewhat limited	
						Slope	0.04
220:							
Youga	50	Not limited		Not limited		Not limited	
Dinnen	40	Somewhat limited		Somewhat limited		Not limited	
		Too sandy	0.01	Too sandy	0.01		
221:							
Youga	40	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.78	Slope	1.00
		Content of large stones	0.02	Content of large stones	0.02	Content of large stones	1.00
Gelkie	30	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.78	Slope	1.00
		Content of large stones	0.32	Content of large stones	0.32	Content of large stones	1.00
Clayburn, warm	20	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.22	Slope	1.00
222:							
Youngston, cool	90	Somewhat limited		Somewhat limited		Not limited	
		Dusty	0.50	Dusty	0.50		

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
223:							
Youngston, well drained	90	Somewhat limited		Somewhat limited		Not limited	
		Dusty	0.50	Dusty	0.50		
224:							
Zillion	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Content of large stones	0.03
Barkelew, moist	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Dusty	0.50	Dusty	0.50	Content of large stones	0.99
		Content of large stones	0.01	Content of large stones	0.01	Gravel content	0.38
						Droughty	0.01
Grapit	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Dusty	0.50	Dusty	0.50	Carbonate content	1.00
						Content of large stones	0.20
						Gravel content	0.09
225:							
Abracon	45	Somewhat limited		Somewhat limited		Not limited	
		Dusty	0.50	Dusty	0.50		
Solirec	40	Not limited		Not limited		Not limited	
226:							
Arches	45	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.92	Too sandy	0.57	Depth to bedrock	1.00
		Too sandy	0.57			Droughty	1.00
						Slope	1.00
Mespun	20	Very limited		Very limited		Very limited	
		Too sandy	1.00	Too sandy	1.00	Slope	1.00
						Droughty	0.34
Rock outcrop	20	Not rated		Not rated		Not rated	
227:							
Bankard family	55	Very limited		Very limited		Somewhat limited	
		Too sandy	1.00	Too sandy	1.00	Too sandy	0.50
						Droughty	0.35
Cameo	35	Somewhat limited		Somewhat limited		Not limited	
		Too sandy	0.31	Too sandy	0.31		
228:							
Bondman	50	Somewhat limited		Not limited		Very limited	
		Slope	0.92			Depth to bedrock	1.00
						Droughty	1.00
						Slope	1.00
Rock outcrop	35	Not rated		Not rated		Not rated	

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
229:							
Cameo	85	Somewhat limited		Somewhat limited		Not limited	
		Too sandy	0.31	Too sandy	0.31		
230:							
Cragnot	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.01	Content of large stones	0.01	Carbonate content	1.00
						Content of large stones	0.99
						Gravel content	0.85
						Droughty	0.83
Pensore	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Dusty	0.50	Dusty	0.50	Droughty	1.00
						Slope	1.00
						Carbonate content	1.00
						Content of large stones	0.20
Grapit	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Dusty	0.50	Dusty	0.50	Carbonate content	1.00
						Droughty	0.80
						Content of large stones	0.20
						Gravel content	0.03
231:							
Green River	70	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.01	Too sandy	0.01	Droughty	0.04
Fluvaquents	15	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Too sandy	1.00	Too sandy	1.00	Flooding	1.00
		Ponding	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Flooding	0.40	Flooding	0.40		
232:							
Lakebench	50	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.76	Too sandy	0.76	Slope	1.00
		Slope	0.18				
Strell	35	Somewhat limited		Somewhat limited		Very limited	
		Too sandy	0.31	Too sandy	0.31	Depth to bedrock	1.00
		Slope	0.18			Droughty	1.00
						Slope	1.00
233:							
Lakebench	50	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.18				
Yampa	35	Somewhat limited		Somewhat limited		Very limited	
		Content of large stones	0.77	Content of large stones	0.77	Content of large stones	1.00
		Slope	0.18			Slope	1.00
						Droughty	0.70

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
234:							
Mantlemine----------	85	Not limited		Not limited		Not limited	
235:							
Mantlemine----------	55	Not limited		Not limited		Not limited	
Emlin---------------	30	Somewhat limited		Somewhat limited		Not limited	
		Dusty	0.50	Dusty	0.50		
236:							
Mido----------------	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Too sandy	0.76	Too sandy	0.76	Droughty	0.01
237:							
Mikim loam----------	55	Somewhat limited		Somewhat limited		Not limited	
		Dusty	0.50	Dusty	0.50		
Mikim silt loam-----	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Dusty	0.50	Dusty	0.50	Salinity	0.50
238:							
Milok---------------	85	Not limited		Not limited		Not limited	
239:							
Milok---------------	45	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.96	Slope	1.00
Solirec-------------	25	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	1.00	Dusty	0.50		
		Dusty	0.50				
Strych--------------	15	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.96	Content of large stones	1.00
		Dusty	0.50	Dusty	0.50	Slope	1.00
		Content of large stones	0.08	Content of large stones	0.08	Droughty	0.33
240:							
Milok---------------	70	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Slope	1.00
		Slope	0.08	Too sandy	0.01		
		Too sandy	0.01				
Strych--------------	20	Somewhat limited		Somewhat limited		Very limited	
		Content of large stones	0.08	Content of large stones	0.08	Content of large stones	1.00
						Slope	0.96
						Droughty	0.85
						Gravel content	0.11
241:							
Pensore-------------	60	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.98	Dusty	0.50	Depth to bedrock	1.00
		Dusty	0.50			Droughty	1.00
						Slope	1.00
						Carbonate content	1.00
						Content of large stones	0.20

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
241:							
Roto	25	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.98	Content of large stones	0.01	Droughty	1.00
		Content of large stones	0.01			Slope	1.00
						Carbonate content	1.00
						Depth to bedrock	0.97
						Content of large stones	0.95
242:							
Riverwash	85	Not rated		Not rated		Not rated	
243:							
Rizno	35	Somewhat limited		Somewhat limited		Very limited	
		Content of large stones	0.08	Content of large stones	0.08	Depth to bedrock	1.00
						Droughty	1.00
						Content of large stones	1.00
						Slope	0.96
Windcomb	35	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Depth to bedrock	1.00
						Gravel content	1.00
						Droughty	1.00
						Slope	0.96
Anasazi	15	Not limited		Not limited		Somewhat limited	
						Slope	0.96
						Depth to bedrock	0.90
						Droughty	0.80
						Content of large stones	0.08
244:							
Rock outcrop	60	Not rated		Not rated		Not rated	
Hackling	30	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.08	Depth to bedrock	1.00
						Droughty	1.00
						Slope	1.00
						Content of large stones	0.20
						Gravel content	0.09
245:							
Rock outcrop	30	Not rated		Not rated		Not rated	
Torriorthents	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Dusty	0.50	Dusty	0.50	Slope	1.00
		Content of large stones	0.01	Content of large stones	0.01	Droughty	1.00
						Content of large stones	0.95
						Gravel content	0.90
Ustorthents	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.05	Content of large stones	0.05	Content of large stones	1.00
						Depth to bedrock	0.20
						Droughty	0.01

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
246:							
Schoonover----------	55	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Depth to bedrock	1.00
						Droughty	1.00
						Gravel content	1.00
						Slope	0.96
						Content of large stones	0.54
Duffymont----------	30	Somewhat limited		Somewhat limited		Very limited	
		Content of large stones	0.98	Content of large stones	0.98	Depth to bedrock	1.00
						Content of large stones	1.00
						Droughty	1.00
						Slope	0.96
247:							
Stout---------------	60	Somewhat limited		Not limited		Very limited	
		Slope	0.50			Depth to bedrock	1.00
						Droughty	1.00
						Slope	1.00
						Content of large stones	0.01
Rock outcrop--------	30	Not rated		Not rated		Not rated	
248:							
Strych--------------	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.98	Dusty	0.50	Content of large stones	1.00
		Dusty	0.50	Content of large stones	0.08	Slope	1.00
		Content of large stones	0.08			Droughty	0.33
Mellenthin----------	35	Very limited		Very limited		Very limited	
		Content of large stones	1.00	Content of large stones	1.00	Depth to bedrock	1.00
		Slope	0.98	Too stony	0.53	Droughty	1.00
		Too stony	0.53			Content of large stones	1.00
						Slope	1.00
249:							
Zillion-------------	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Content of large stones	0.03
						Droughty	0.01
Yampa---------------	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.77	Content of large stones	0.77	Content of large stones	1.00
						Droughty	0.70
Clyl----------------	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	1.00
						Carbonate content	1.00
						Droughty	0.01
						Content of large stones	0.01

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
250:							
Abracon	85	Somewhat limited		Somewhat limited		Not limited	
		Dusty	0.50	Dusty	0.50		
251:							
Badland	60	Not rated		Not rated		Very limited	
						Depth to bedrock	1.00
						Slope	1.00
						Droughty	1.00
						Salinity	1.00
						Too clayey	1.00
Renegade	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
		Too sandy	0.01	Too sandy	0.01	Droughty	0.12
252:							
Bigtom	50	Somewhat limited		Not limited		Very limited	
		Slope	0.50			Slope	1.00
						Droughty	0.98
Namlot	20	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Content of large stones	0.77	Depth to bedrock	1.00
		Content of large stones	0.77	Slope	0.08	Slope	1.00
						Content of large stones	1.00
						Droughty	1.00
						Gravel content	0.04
Dokie	15	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.96	Slope	1.00
						Droughty	1.00
253:							
Clapper	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Dusty	0.50	Dusty	0.50	Slope	0.96
						Gravel content	0.32
						Droughty	0.05
254:							
Cliff	85	Not limited		Not limited		Not limited	
255:							
Clyl	45	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.08	Slope	1.00
						Carbonate content	1.00
						Content of large stones	0.32
						Droughty	0.22
						Gravel content	0.07
Pinerid	40	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.08	Content of large stones	0.01	Depth to bedrock	1.00
		Content of large stones	0.01			Droughty	1.00
						Carbonate content	1.00
						Slope	1.00
						Content of large stones	0.99

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
256:							
Cortyzack	65	Not limited		Not limited		Somewhat limited	
						Slope	0.96
Diagulch	20	Not limited		Not limited		Somewhat limited	
						Slope	0.04
257:							
Cortyzack	55	Not limited		Not limited		Somewhat limited	
						Slope	0.96
Duffymont	30	Somewhat limited		Somewhat limited		Very limited	
		Content of large stones	0.98	Content of large stones	0.98	Depth to bedrock	1.00
						Content of large stones	1.00
						Droughty	1.00
						Slope	0.96
258:							
Cortyzack	45	Not limited		Not limited		Somewhat limited	
						Slope	0.96
Flynncove	45	Not limited		Not limited		Very limited	
						Slope	1.00
						Content of large stones	0.92
						Droughty	0.48
259:							
Denco	45	Not limited		Not limited		Very limited	
						Slope	1.00
						Depth to bedrock	0.03
Gerst	40	Very limited		Very limited		Very limited	
		Water erosion	1.00	Water erosion	1.00	Depth to bedrock	1.00
		Slope	0.82	Dusty	0.50	Droughty	1.00
		Dusty	0.50			Slope	1.00
						Content of large stones	0.01
260:							
Dokie	70	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.96	Slope	1.00
						Droughty	1.00
Flynncove	15	Very limited		Very limited		Very limited	
		Slope	1.00	Content of large stones	1.00	Slope	1.00
		Content of large stones	1.00	Slope	0.96	Content of large stones	1.00
						Droughty	1.00
261:							
Dokie	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Droughty	1.00

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
261:							
Namlot	40	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Content of large stones	0.77	Depth to bedrock	1.00
		Content of large stones	0.77	Slope	0.08	Content of large stones	0.77
						Droughty	1.00
						Gravel content	0.04
262:							
Gompers	85	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Depth to bedrock	1.00
						Droughty	1.00
						Gravel content	1.00
						Slope	1.00
						Content of large stones	0.03
263:							
Hanksville	85	Very limited		Very limited		Somewhat limited	
		Water erosion	1.00	Water erosion	1.00	Slope	0.96
						Depth to bedrock	0.20
						Salinity	0.13
264:							
Mikim	85	Very limited		Very limited		Somewhat limited	
		Water erosion	1.00	Water erosion	1.00	Slope	0.04
		Dusty	0.50	Dusty	0.50		
265:							
Mikim	85	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Sodium content	1.00
						Salinity	0.50
266:							
Rock outcrop	40	Not rated		Not rated		Not rated	
Boxring	25	Very limited		Very limited		Very limited	
		Content of large stones	1.00	Content of large stones	1.00	Depth to bedrock	1.00
		Slope	0.18			Content of large stones	1.00
						Droughty	1.00
						Slope	1.00
Tridell	25	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.96	Slope	1.00
		Content of large stones	0.77	Content of large stones	0.77	Content of large stones	1.00
		Dusty	0.50	Dusty	0.50	Droughty	0.40
						Gravel content	0.04
267:							
Solirec	35	Somewhat limited		Somewhat limited		Not limited	
		Too sandy	0.01	Too sandy	0.01		
Abracon	30	Somewhat limited		Somewhat limited		Not limited	
		Dusty	0.50	Dusty	0.50		
Begay	20	Not limited		Not limited		Somewhat limited	
						Slope	0.04

Table 9.-Recreation--Golf fairways, paths and trails, and off-road motorcyle trails--Continued

Map symbol and soil name	Pct. of map unit	Paths and trails		Off-road motorcycle trails		Golf fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
268:							
Toliver	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
						Droughty	0.28
Rock outcrop	30	Not rated		Not rated		Not rated	
269:							
Walknolls	60	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Slope	0.96	Depth to bedrock	1.00
						Slope	1.00
						Droughty	1.00
						Gravel content	1.00
						Content of large stones	0.84
Badland	15	Not rated		Not rated		Very limited	
						Depth to bedrock	1.00
						Slope	1.00
						Droughty	1.00
						Salinity	1.00
						Too clayey	1.00
Rock outcrop	10	Not rated		Not rated		Not rated	
270:							
Walknolls	55	Somewhat limited		Somewhat limited		Very limited	
		Dusty	0.50	Dusty	0.50	Depth to bedrock	1.00
						Droughty	1.00
						Gravel content	1.00
						Slope	1.00
						Content of large stones	0.03
Gilston	35	Not limited		Not limited		Very limited	
						Sodium content	1.00
						Droughty	0.06
						Content of large stones	0.01
271:							
Water	95	Not rated		Not rated		Not rated	

Table 10.--Wildlife habitat

(See text for definitions of terms used in this table. Absence of an entry indicates that no rating is applicable.)

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
1:												
Abor	Poor	Fair	Poor	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Poor
2:												
Abor	Very poor	Very poor	Fair	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Fair
3:												
Adderton	Poor	Poor	Good	---	Fair	Fair	Poor	Poor	Poor	Fair	Poor	Fair
4:												
Almy	Poor	Fair	Fair	---	---	Fair	Very poor	Very poor	Fair	---	Very poor	Fair
5:												
Apmay	Poor	Fair	Fair	---	---	Fair	Fair	Good	Fair	---	Fair	Fair
6:												
Avalon	Poor	Poor	Poor	---	---	Poor	Very poor	Very poor	Poor	---	Very poor	Poor
Mack	---	---	---	---	---	---	---	---	---	---	---	---
7:												
Avalon	Poor	Poor	Poor	---	Very poor	Fair	Very poor	Very poor	Poor	Very poor	Very poor	Poor
Persayo, moist	Very poor	Poor	Poor	---	---	Poor	Very poor	Very poor	Poor	---	Very poor	Poor
Degater	Very poor	Very poor	Poor	---	---	Fair	Very poor	Very poor	Very poor	---	Very poor	Poor
8:												
Badland	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
9:												
Baroid	Poor	Poor	Poor	---	---	Poor	Very poor	Very poor	Poor	---	Very poor	Poor

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
9:												
Eghelm	---	---	---	---	---	---	---	---	---	---	---	---
10:												
Battlement	Fair	Fair	Fair	---	---	Fair	Poor	Very poor	Fair	---	Very poor	Fair
11:												
Battlement, saline	Very poor	Poor	Very poor	---	Poor	Poor	Poor	Poor	Very poor	Very poor	Poor	Poor
12:												
Berlake	Poor	Fair	Fair	---	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor	Fair
13:												
Berlake	Poor	Poor	Fair	---	Fair	Fair	Poor	Very poor	Poor	Fair	Very poor	Fair
14:												
Berlake	Poor	Fair	Fair	---	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor	Fair
Maysprings	Poor	Fair	Fair	---	---	Good	Very poor	Very poor	Fair	---	Very poor	Fair
15:												
Berlake	Poor	Poor	Fair	---	---	Good	Very poor	Very poor	Poor	---	Very poor	Fair
Taffom	Poor	Fair	Fair	---	---	Fair	Very poor	Very poor	Fair	---	Very poor	Fair
Gretdivid	Poor	Poor	Fair	---	---	Poor	Very poor	Very poor	Poor	---	Very poor	Poor
16:												
Bilhil	Fair	Fair	Fair	---	---	Fair	Fair	Fair	Fair	---	Fair	Fair
17:												
Binco	Very poor	Very poor	Fair	---	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor	Fair

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
18:												
Boltus	Very poor	Very poor	Poor	---	Very poor	Poor	Very poor	Very poor	Very poor	Very poor	Very poor	Poor
Beamton	Poor	Poor	Poor	---	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor	Poor
19:												
Borollic Natrargids	Very poor	Very poor	Poor	---	Very poor	Fair	Poor	Very poor	Very poor	Very poor	Very poor	Fair
Borollic Haplargids	Poor	Fair	Fair	---	Poor	Fair	Very poor	Very poor	Fair	Poor	Very poor	Fair
Ustic Torrifluvents	Fair	Fair	Fair	---	Poor	Fair	Poor	Poor	Fair	Poor	Poor	Fair
20:												
Brownsto	Poor	Poor	Fair	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Fair
Castee	Poor	Poor	Fair	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Fair
21:												
Bulkley	Poor	Poor	Fair	---	Poor	Fair	Very poor	Very poor	Poor	Poor	Very poor	Fair
22:												
Bulkley	Poor	Fair	Poor	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Poor
23:												
Bulkley	Poor	Fair	Poor	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Poor
24:												
Bulkley	Very poor	Fair	Poor	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Poor
Quilt	Very poor	Very poor	Fair	---	---	Good	Very poor	Very poor	Poor	---	Very poor	Fair
25:												
Campspass	Poor	Fair	Good	---	---	Good	Very poor	Very poor	Fair	---	Very poor	Good

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
26:												
Campspass	Poor	Fair	Good	---	---	Good	Very poor	Very poor	Fair	---	Very poor	Good
27:												
Canlodore	Very poor	Very poor	Fair	Poor	Fair	Good	Very poor	Very poor	Poor	Fair	Very poor	Fair
28:												
Carbol	Poor	Poor	Poor	---	---	Poor	Very poor	Very poor	Poor	---	Very poor	Poor
Irigul	Very poor	Very poor	Fair	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Fair
Rock outcrop	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
29:												
Carbol	Poor	Poor	Poor	---	---	Poor	Very poor	Very poor	Poor	---	Very poor	Poor
Miracle	Poor	Poor	Good	---	---	Fair	Poor	Very poor	Fair	---	Very poor	Fair
30:												
Carmody	Poor	Fair	Fair	---	---	Fair	Very poor	Very poor	Fair	---	Very poor	Fair
Rock River	Poor	Poor	Fair	---	Poor	Fair	Very poor	Very poor	Poor	Poor	Very poor	Fair
Crestman	Poor	Poor	Poor	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Poor
31:												
Castee	Poor	Poor	Fair	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Fair
32:												
Chroder	Poor	Poor	Poor	---	Very poor	Poor	Poor	Very poor	Poor	Very poor	Very poor	Poor

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
33:												
Clayburn, warm----------	Poor	Poor	Good	---	---	Good	Very poor	Very poor	Fair	---	Very poor	Good
34:												
Clayburn----------	Very poor	Very poor	Good	---	Good	Good	Very poor	Very poor	Poor	Fair	Very poor	Good
Foidel----------	Very poor	Very poor	Good	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor	Good
35:												
Clayburn----------	Very poor	Very poor	Good	---	---	Good	Very poor	Very poor	Poor	---	Very poor	Good
Youga, moist----------	Very poor	Very poor	Good	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Fair
36:												
Clifsand----------	Poor	Poor	Poor	---	Very poor	Poor	Very poor	Very poor	Poor	Very poor	Very poor	Poor
Chroder----------	Poor	Poor	Poor	---	Very poor	Poor	Poor	Very poor	Poor	Very poor	Very poor	Poor
37:												
Cochetopa----------	Poor	Poor	Good	---	---	Good	Very poor	Very poor	Fair	---	Very poor	Good
38:												
Cochetopa----------	Very poor	Very poor	Good	---	---	Good	Very poor	Very poor	Fair	---	Very poor	Good
39:												
Cochetopa, warm---------	Poor	Poor	Good	---	---	Good	Very poor	Very poor	Fair	---	Very poor	Good
40:												
Cochetopa----------	Poor	Poor	Good	---	---	Good	Very poor	Very poor	Fair	---	Very poor	Good
Gothic----------	Very poor	Very poor	Good	---	---	Good	Very poor	Very poor	Poor	---	Very poor	Good

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
41:												
Cochetopa	Very poor	Very poor	Good	---	---	Good	Very poor	Very poor	Poor	---	Very poor	Good
Gothic	Very poor	Very poor	Good	---	---	Good	Very poor	Very poor	Poor	---	Very poor	Good
42:												
Cochetopa	Poor	Poor	Good	---	---	Good	Very poor	Very poor	Fair	---	Very poor	Good
Jerry	Poor	Poor	Good	---	Good	Good	Very poor	Very poor	Fair	Good	Very poor	Good
43:												
Coldspring, moist	Poor	Poor	Good	---	---	Fair	Poor	Very poor	Poor	---	Very poor	Fair
44:												
Cowestglen	Poor	Fair	Fair	---	---	Fair	Very poor	Very poor	Fair	---	Very poor	Fair
45:												
Coyet	Poor	Poor	Fair	---	---	Good	Very poor	Very poor	Poor	---	Very poor	Fair
46:												
Coyet	Poor	Poor	Fair	---	---	Good	Very poor	Very poor	Poor	---	Very poor	Fair
47:												
Coyet	Very poor	Very poor	Fair	---	---	Good	Very poor	Very poor	Very poor	---	Very poor	Fair
Crestman, moist	Very poor	Very poor	Poor	---	Poor	Fair	Very poor	Very poor	Very poor	Poor	Very poor	Poor
48:												
Crago	Very poor	Very poor	Poor	---	---	Fair	Very poor	Very poor	Poor	Very poor	Very poor	Poor
Pensore	Very poor	Very poor	Poor	---	Very poor	Fair	Very poor	Very poor	Very poor	Very poor	Very poor	Poor

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
48:												
Grapit	Very poor	Very poor	Fair	---	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor	Fair
49:												
Cryoborolls, slumped	Very poor	Very poor	Good	---	Good	Good	Very poor	Very poor	Poor	Good	Very poor	Good
50:												
Cushool	Poor	Poor	Fair	---	---	Fair	Poor	Very poor	Poor	---	Very poor	Fair
51:												
Cushool	Poor	Poor	Fair	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Fair
52:												
Danavore	Very poor	Very poor	Fair	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Fair
Waybe	Poor	Fair	Fair	---	---	Fair	Very poor	Very poor	Fair	---	Very poor	Fair
53:												
Davtone	Poor	Poor	Good	---	---	Good	Very poor	Very poor	Fair	---	Very poor	Good
Forsey	Poor	Poor	Fair	---	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor	Fair
54:												
Deaver	Very poor	Very poor	Poor	---	---	Poor	Very poor	Very poor	Very poor	---	Very poor	Poor
Avalon	Poor	Poor	Poor	---	---	Poor	Very poor	Very poor	Poor	---	Very poor	Poor
55:												
Deaver	Very poor	Very poor	Poor	---	---	Poor	Very poor	Very poor	Very poor	---	Very poor	Poor
Chipeta	Very poor	Very poor	Very poor	---	---	Poor	Very poor	Very poor	Very poor	---	Very poor	Very poor

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
56:												
Debone	Very poor	Very poor	Very poor	---	---	Poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
57:												
Detra	Poor	Poor	Fair	---	---	Fair	Poor	Very poor	Poor	---	Very poor	Fair
Cortyzack	Poor	Fair	Good	---	---	Good	Very poor	Very poor	Good	---	Poor	Good
58:												
Diaflats	Poor	Poor	Poor	---	---	Poor	Very poor	Very poor	Poor	---	Very poor	Poor
Fondillas	Very poor	Very poor	Poor	---	---	Poor	Poor	Very poor	Very poor	---	Very poor	Poor
59:												
Dranyon	Very poor	Very poor	Fair	---	Fair	Good	Very poor	Very poor	Poor	Fair	Very poor	Fair
60:												
Dumps, mine	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
61:												
Ecklund	Poor	Poor	Poor	---	Very poor	Poor	Very poor	Very poor	Poor	Very poor	Very poor	Poor
Tipperary	Very poor	Very poor	Poor	---	---	Poor	Very poor	Very poor	Very poor	---	Very poor	Poor
62:												
Eghelm	Poor	Poor	Fair	---	---	Poor	Poor	Very poor	Poor	---	Very poor	Poor
63:												
Eghelm, moist	Poor	Poor	Fair	---	---	Poor	Poor	Very poor	Poor	---	Very poor	Poor
64:												
Emlin	Poor	Fair	Fair	---	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor	Fair

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
65:												
Emlin	Poor	Fair	Fair	---	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor	Fair
Tymosling	Poor	Poor	Fair	---	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor	Fair
66:												
Evanot	Poor	Fair	Fair	---	---	Good	Poor	Very poor	Fair	---	Poor	Fair
67:												
Evanot	Poor	Poor	Fair	---	---	Good	Very poor	Very poor	Poor	---	Very poor	Fair
68:												
Evanot	Poor	Fair	Fair	---	---	Good	Poor	Very poor	Fair	---	Poor	Fair
Yamo	Fair	Fair	Fair	---	---	Fair	Very poor	Very poor	Fair	---	Very poor	Fair
69:												
Fenster	Poor	Poor	Fair	---	Very poor	Poor	Very poor	Very poor	Poor	Very poor	Very poor	Poor
Thenipel	Poor	Poor	Fair	---	Poor	Fair	Poor	Very poor	Poor	Poor	Very poor	Fair
70:												
Fluvaquents, frequently flooded	Poor	Poor	Fair	---	Poor	Very poor	Good	Good	Poor	Poor	Good	Poor
Haplaquolls, frequently flooded	Poor	Poor	Fair	---	Poor	Very poor	Good	Good	Poor	Poor	Good	Poor
71:												
Flygare, dry	Very poor	Very poor	Good	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor	Good
72:												
Foidel, cool	Poor	Fair	Good	Good	Good	Good	Poor	Very poor	Fair	Good	Very poor	Good

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
73:												
Foidel	Very poor	Poor	Good	Good	Good	Good	Very poor	Very poor	Poor	Good	Very poor	Good
74:												
Foidel, moist	Poor	Fair	Good	Good	Good	Good	Poor	Very poor	Fair	Good	Very poor	Good
Flygare	Poor	Poor	Good	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor	Good
Skyway, moist	Very poor	Poor	Good	---	---	Fair	Poor	Very poor	Fair	---	Very poor	Fair
75:												
Fonce	Poor	Poor	Poor	---	---	Fair	Very poor	Very poor	Poor	Very poor	Very poor	Poor
76:												
Fonce	Poor	Poor	Fair	---	---	Fair	Poor	Very poor	Poor	---	Very poor	Fair
77:												
Forelle	Fair	Fair	Fair	---	Poor	Fair	Very poor	Very poor	Fair	Poor	Very poor	Fair
78:												
Forelle	Poor	Poor	Fair	---	Poor	Fair	Very poor	Very poor	Poor	Poor	Very poor	Fair
79:												
Forelle	Fair	Fair	Fair	---	Poor	Fair	Very poor	Very poor	Fair	Poor	Very poor	Fair
Evanot	Poor	Fair	Fair	---	---	Good	Poor	Very poor	Fair	---	Poor	Fair
80:												
Forelle	Fair	Fair	Fair	---	Poor	Fair	Very poor	Very poor	Fair	Poor	Very poor	Fair
Evanot	Poor	Poor	Fair	---	---	Good	Very poor	Very poor	Poor	---	Very poor	Fair

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
81:												
Forelle	Fair	Fair	Fair	---	Poor	Fair	Very poor	Very poor	Fair	Poor	Very poor	Fair
Obadia	Poor	Poor	Fair	---	Poor	Fair	Poor	Very poor	Poor	Poor	Very poor	Fair
82:												
Forelle	Poor	Poor	Fair	---	Poor	Fair	Very poor	Very poor	Poor	Poor	Very poor	Fair
Pinelli	Poor	Poor	Fair	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Fair
Maysprings	Poor	Poor	Fair	---	---	Good	Very poor	Very poor	Fair	---	Very poor	Fair
83:												
Forsey	Poor	Poor	Fair	---	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor	Fair
Libeg	Poor	Poor	Good	---	---	Fair	Poor	Very poor	Poor	---	Very poor	Fair
84:												
Gebson, moist	Very poor	Poor	Fair	---	Good	Good	Very poor	Very poor	Poor	Fair	Very poor	Fair
Youga	Poor	Poor	Good	---	Fair	Fair	Poor	Very poor	Poor	Fair	Very poor	Fair
85:												
Giarch	Very poor	Poor	Very poor	---	Very poor	Fair	Poor	Poor	Poor	Very poor	Poor	Poor
86:												
Gracot	Very poor	Poor	Poor	---	---	Good	Very poor	Very poor	Poor	---	Very poor	Fair
Maybell	Poor	Poor	Fair	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Fair

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
87:												
Gretdivid	Poor	Poor	Fair	---	---	Poor	Very poor	Very poor	Poor	---	Very poor	Poor
Taffom	Poor	Fair	Fair	---	---	Fair	Very poor	Very poor	Fair	---	Very poor	Fair
Abor	Poor	Fair	Poor	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Poor
88:												
Grieves	Poor	Poor	Fair	---	Poor	Good	Very poor	Very poor	Poor	Poor	Very poor	Fair
89:												
Grieves	Poor	Poor	Fair	---	Poor	Good	Very poor	Very poor	Poor	Poor	Very poor	Fair
90:												
Grieves	Poor	Poor	Fair	---	Poor	Good	Very poor	Very poor	Poor	Poor	Very poor	Fair
Crestman	Very poor	Very poor	Poor	---	Poor	Fair	Very poor	Very poor	Very poor	Poor	Very poor	Poor
91:												
Grieves	Poor	Poor	Fair	---	Poor	Good	Very poor	Very poor	Poor	Poor	Very poor	Fair
Yamo	Fair	Fair	Fair	---	---	Fair	Very poor	Very poor	Fair	---	Very poor	Fair
Crestman	Very poor	Very poor	Poor	---	Poor	Fair	Very poor	Very poor	Very poor	Poor	Very poor	Poor
92:												
Grimm	Very poor	Very poor	Fair	---	Poor	Fair	Very poor	Very poor	Poor	Poor	Very poor	Fair
Ustic Torriorthents, shallow	Very poor	Very poor	Poor	---	---	Poor	Very poor	Very poor	Very poor	---	Very poor	Poor

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
93:												
Gullied land	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Good	Very poor	Very poor	Fair	Very poor
94:												
Hapney, moist	Poor	Poor	Fair	---	Poor	Fair	Poor	Poor	Poor	Poor	Poor	Fair
95:												
Haterton	Poor	Poor	Fair	---	Very poor	Poor	Very poor	Very poor	Poor	Poor	Very poor	Fair
Piezon	Poor	Fair	Fair	---	Poor	Fair	Very poor	Very poor	Fair	Poor	Very poor	Fair
96:												
Heathcoat	Poor	Poor	Good	---	Good	Good	Very poor	Very poor	Fair	Fair	Very poor	Good
97:												
Heathcoat	Poor	Poor	Good	---	Good	Good	Very poor	Very poor	Fair	Fair	Very poor	Good
Clayburn	Poor	Poor	Good	---	---	Good	Very poor	Very poor	Fair	---	Very poor	Good
98:												
Herm	Very poor	Very poor	Good	---	---	Good	Very poor	Very poor	Poor	---	Very poor	Good
Fughes	Poor	Poor	Good	---	---	Good	Very poor	Very poor	Fair	---	Very poor	Good
99:												
Hesperus, dry	Poor	Fair	Good	---	---	Good	Very poor	Very poor	Fair	---	Very poor	Good
100:												
Hesperus	Very poor	Fair	Good	---	---	Good	Very poor	Very poor	Fair	---	Very poor	Good
101:												
Hesperus	Poor	Fair	Good	---	---	Good	Very poor	Very poor	Fair	---	Very poor	Good

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
102:												
Holter	Poor	Poor	Fair	---	---	Good	Very poor	Very poor	Poor	---	Very poor	Fair
Detra	Poor	Fair	Good	---	Good	Good	Poor	Very poor	Fair	Good	Very poor	Good
103:												
Iles	Poor	Fair	Good	---	---	Good	Very poor	Very poor	Fair	---	Very poor	Good
104:												
Ironco	Very poor	Very poor	Good	---	---	Good	Very poor	Very poor	Poor	---	Very poor	Good
Mulgon, dry	Very poor	Very poor	Good	---	Good	Good	Very poor	Very poor	Poor	Good	Very poor	Good
105:												
Ironsprings	Poor	Fair	Fair	---	---	Fair	Very poor	Very poor	Fair	---	Very poor	Fair
106:												
Ironsprings	Poor	Fair	Fair	---	---	Fair	Very poor	Very poor	Fair	---	Very poor	Fair
107:												
Ironsprings	Poor	Fair	Fair	---	---	Fair	Very poor	Very poor	Fair	---	Very poor	Fair
Maysprings	Poor	Poor	Fair	---	---	Good	Very poor	Very poor	Fair	---	Very poor	Fair
Gretdivid	Poor	Poor	Fair	---	---	Poor	Very poor	Very poor	Poor	---	Very poor	Poor
108:												
Jerry	Poor	Poor	Good	Good	---	Good	Very poor	Very poor	Fair	Good	Very poor	Good
Cochetopa	Poor	Poor	Good	---	---	Good	Very poor	Very poor	Fair	---	Very poor	Good

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
109:												
Joebas	Very poor	Very poor	Poor	---	Poor	Fair	Very poor	Very poor	Poor	Poor	Very poor	Poor
Rock outcrop	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
110:												
Kemmerer	Poor	Poor	Fair	---	---	Good	Poor	Very poor	Fair	---	Poor	Fair
111:												
Kemmerer	Very poor	Very poor	Fair	---	---	Good	Very poor	Very poor	Poor	---	Very poor	Fair
Grapit	Very poor	Very poor	Fair	---	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor	Fair
112:												
Kemmerer	Very poor	Very poor	Fair	---	---	Good	Very poor	Very poor	Poor	---	Very poor	Fair
Moyerson	Very poor	Very poor	Poor	---	Poor	Fair	Very poor	Very poor	Very poor	Poor	Very poor	Poor
113:												
Kemmerer	Poor	Poor	Fair	---	---	Good	Poor	Very poor	Fair	---	Poor	Fair
Yamo	Poor	Poor	Fair	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Fair
114:												
Lamphier	Poor	Poor	Good	Good	---	Good	Very poor	Very poor	Fair	Good	Very poor	Good
115:												
Lamphier	Very poor	Very poor	Good	Good	---	Good	Very poor	Very poor	Poor	Good	Very poor	Good
116:												
Lamphier	Poor	Poor	Good	Good	---	Good	Very poor	Very poor	Fair	Good	Very poor	Good

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
116:												
Jerry	Poor	Poor	Good	Good	---	Good	Very poor	Very poor	Fair	Good	Very poor	Good
117:												
Lamphier	Very poor	Very poor	Good	Good	---	Good	Very poor	Very poor	Poor	Good	Very poor	Good
Jerry	Very poor	Very poor	Good	Good	---	Good	Very poor	Very poor	Poor	Fair	Very poor	Good
118:												
Lander	Poor	Fair	Good	Fair	Fair	Fair	Good	Fair	Fair	Fair	Fair	Fair
119:												
Langspring	Poor	Fair	Fair	---	---	Poor	Very poor	Very poor	Fair	---	Very poor	Fair
120:												
Layoint	Poor	Fair	Fair	---	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor	Fair
Moosed	Very poor	Very poor	Poor	---	Very poor	Fair	Very poor	Very poor	Very poor	Very poor	Very poor	Poor
Berlake	Poor	Fair	Fair	---	---	Good	Poor	Very poor	Fair	---	Very poor	Fair
121:												
Leaps	Poor	Poor	Good	Good	Good	Good	Poor	Poor	Fair	Good	Poor	Good
122:												
Leswill	---	---	Fair	---	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor	Poor
Rogrube	Poor	Poor	Poor	---	---	Poor	Poor	Very poor	Poor	---	Very poor	Poor
123:												
Lilsnake	Very poor	Very poor	Poor	---	---	Fair	Very poor	Very poor	Very poor	---	Very poor	Poor
Sandwash	Poor	Fair	Fair	---	---	Fair	Very poor	Very poor	Fair	---	Very poor	Fair

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
124:												
Losee	Very poor	Very poor	Good	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Fair
Thornburgh, dry	Very poor	Very poor	Fair	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Fair
125:												
Massadona	Poor	Poor	Fair	---	---	Poor	Very poor	Very poor	Poor	---	Very poor	Poor
126:												
Massadona	Poor	Poor	Fair	---	---	Poor	Very poor	Very poor	Poor	---	Very poor	Poor
Youngston, moist	Poor	Poor	Poor	---	---	Poor	Poor	Very poor	Poor	---	Very poor	Poor
127:												
Maudlin	Fair	Fair	Good	---	---	Good	Very poor	Very poor	Fair	---	Very poor	Good
Duffymont	Very poor	Very poor	Poor	---	Poor	Fair	Very poor	Very poor	Very poor	Poor	Very poor	Poor
128:												
Maybell	Poor	Poor	Fair	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Fair
129:												
Maybell	Very poor	Very poor	Fair	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Fair
130:												
Maysprings	Poor	Fair	Fair	---	---	Good	Very poor	Very poor	Fair	---	Very poor	Fair
131:												
Maysprings	Poor	Poor	Fair	---	---	Good	Very poor	Very poor	Fair	---	Very poor	Fair
Gretdivid	Poor	Poor	Fair	---	---	Poor	Very poor	Very poor	Poor	---	Very poor	Poor

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
132:												
Milren	Poor	Fair	Fair	---	Poor	Fair	Poor	Very poor	Fair	Poor	Very poor	Fair
133:												
Miracle	Poor	Poor	Good	---	---	Fair	Poor	Very poor	Fair	---	Very poor	Fair
Coldspring	Poor	Poor	Good	---	---	Fair	Poor	Very poor	Poor	---	Very poor	Fair
134:												
Morapos	Fair	Fair	Good	---	---	Good	Poor	Very poor	Fair	---	Very poor	Good
135:												
Morapos	Poor	Fair	Good	---	---	Good	Very poor	Very poor	Fair	---	Very poor	Good
136:												
Morapos	Fair	Fair	Good	---	---	Good	Poor	Very poor	Fair	---	Very poor	Good
Pagoda	Fair	Fair	Good	---	---	Good	Poor	Very poor	Fair	---	Very poor	Good
137:												
Morset	Poor	Poor	Good	---	---	Fair	Very poor	Very poor	Fair	---	Poor	Fair
Youga	Poor	Poor	Good	---	Fair	Fair	Poor	Very poor	Poor	Fair	Very poor	Fair
138:												
Moyerson	Very poor	Very poor	Poor	---	Poor	Fair	Very poor	Very poor	Very poor	Poor	Very poor	Poor
Rentsac	Very poor	Very poor	Poor	---	Fair	Fair	Very poor	Very poor	Very poor	Poor	Very poor	Poor
139:												
Muggins	Poor	Poor	Fair	---	Good	Good	Very poor	Very poor	Poor	Good	Very poor	Good

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
140:												
Ninot	Very poor	Very poor	Poor	---	Poor	Poor	Poor	Very poor	Very poor	Poor	Very poor	Poor
Crago	Very poor	Very poor	Poor	---	---	Fair	Very poor	Very poor	Poor	Very poor	Very poor	Poor
Garlips	Very poor	Very poor	Good	---	---	Good	Very poor	Very poor	Poor	---	Very poor	Good
141:												
Nortez, cool	Poor	Fair	Good	---	---	Good	Very poor	Very poor	Fair	---	Very poor	Good
Morapos	Fair	Fair	Good	---	---	Good	Poor	Very poor	Fair	---	Very poor	Good
142:												
Nortez, cool	Poor	Fair	Good	---	---	Good	Very poor	Very poor	Fair	---	Very poor	Good
Morapos	Poor	Fair	Good	---	---	Good	Very poor	Very poor	Fair	---	Very poor	Good
143:												
Nunemaker	Poor	Fair	Fair	---	Poor	Fair	Poor	Poor	Fair	Poor	Poor	Fair
144:												
Pagoda	Poor	Fair	Good	---	---	Good	Very poor	Very poor	Fair	---	Very poor	Good
145:												
Pagoda	Fair	Fair	Good	---	---	Good	Poor	Very poor	Fair	---	Very poor	Good
146:												
Pavillion	Poor	Fair	Fair	---	Poor	Fair	Poor	Very poor	Fair	Poor	Very poor	Fair
Degater	Very poor	Very poor	Poor	---	---	Fair	Very poor	Very poor	Very poor	---	Very poor	Poor
147:												
Peeler	Poor	Poor	Good	---	Good	Good	Very poor	Very poor	Fair	Good	Very poor	Good

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
148:												
Pilotpeak	Poor	Poor	Fair	---	---	Fair	Poor	Very poor	Poor	---	Very poor	Fair
Grubrob	Poor	Poor	Fair	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Fair
149:												
Pinelli	Fair	Fair	Fair	---	---	Fair	Poor	Very poor	Fair	---	Very poor	Fair
150:												
Pinelli	Fair	Fair	Fair	---	---	Fair	Poor	Very poor	Fair	---	Very poor	Fair
151:												
Pinelli, dry	Fair	Fair	Fair	---	---	Fair	Poor	Very poor	Fair	---	Very poor	Fair
152:												
Pinridge	Poor	Fair	Fair	---	---	Good	Very poor	Very poor	Fair	---	Very poor	Fair
153:												
Pricecreek	Poor	Poor	Fair	---	---	Poor	Poor	Very poor	Poor	Very poor	Very poor	Poor
154:												
Quealman	Poor	Poor	Poor	---	---	Poor	Poor	Very poor	Poor	---	Very poor	Poor
155:												
Rencot	Very poor	Very poor	Poor	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Poor
Duffymont	Very poor	Very poor	Poor	---	Poor	Fair	Very poor	Very poor	Very poor	Poor	Very poor	Poor
156:												
Rentsac	Very poor	Very poor	Poor	---	Fair	Fair	Very poor	Very poor	Very poor	Poor	Very poor	Poor
157:												
Rentsac	Very poor	Very poor	Poor	---	Fair	Fair	Very poor	Very poor	Very poor	Poor	Very poor	Poor

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
157:												
Moyerson	Very poor	Very poor	Poor	---	Poor	Fair	Very poor	Very poor	Very poor	Poor	Very poor	Poor
158:												
Rock outcrop	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
Earsman	Very poor	Very poor	Poor	---	Fair	Fair	Very poor	Very poor	Very poor	Fair	Very poor	Poor
159:												
Rock outcrop	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
Haploborolls	Very poor	Very poor	Fair	---	Fair	Good	Very poor	Very poor	Poor	Fair	Very poor	Fair
160:												
Rock outcrop	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
Torriorthents	Very poor	Very poor	Poor	---	Poor	Fair	Very poor	Very poor	Poor	Poor	Very poor	Poor
161:												
Rock River	Poor	Fair	Fair	---	Fair	Fair	Poor	Fair	Fair	Fair	Poor	Fair
162:												
Rock River	Poor	Poor	Fair	---	Poor	Fair	Very poor	Very poor	Poor	Poor	Very poor	Fair
163:												
Rock River	Poor	Poor	Fair	---	Poor	Fair	Very poor	Very poor	Poor	Poor	Very poor	Fair
164:												
Rock River	Poor	Poor	Fair	---	Poor	Fair	Very poor	Very poor	Poor	Poor	Very poor	Fair
Taffom	Fair	Fair	Fair	---	---	Fair	Poor	Very poor	Fair	---	Very poor	Fair

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
165:												
Rogrube sandy loam------	Poor	Poor	Poor	---	---	Poor	Poor	Very poor	Poor	---	Very poor	Poor
Rogrube clay loam-------	Poor	Poor	Poor	---	---	Poor	Poor	Very poor	Poor	---	Very poor	Poor
166:												
Routt-------------------	Poor	Poor	Good	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor	Good
167:												
Routt-------------------	Poor	Poor	Good	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor	Good
Cochetopa---------------	Poor	Poor	Good	---	---	Good	Very poor	Very poor	Fair	---	Very poor	Good
Binco-------------------	Poor	Poor	Fair	---	Fair	Good	Very poor	Very poor	Poor	Fair	Very poor	Fair
168:												
Ruedloff----------------	Poor	Poor	Poor	---	---	Poor	Very poor	Very poor	Poor	---	Very poor	Poor
169:												
Ruedloff----------------	Poor	Poor	Poor	---	---	Poor	Very poor	Very poor	Poor	---	Very poor	Poor
Dunul-------------------	Poor	Poor	Poor	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Poor
170:												
Ryan Park---------------	Poor	Fair	Fair	---	Poor	Fair	Poor	Very poor	Fair	Poor	Very poor	Fair
171:												
Ryan Park---------------	Poor	Fair	Fair	---	Poor	Fair	Poor	Very poor	Fair	Poor	Very poor	Fair
172:												
Ryan Park---------------	Poor	Poor	Fair	---	Poor	Fair	Very poor	Very poor	Poor	Poor	Very poor	Fair

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herba-ceous plants	Hard-wood trees	Conif-erous plants	Shrubs	Wetland plants	Shallow water areas	Open-land wild-life	Wood-land wild-life	Wetland wild-life	Range-land wild-life
172:												
Coyet	Poor	Poor	Fair	---	---	Good	Very poor	Very poor	Poor	---	Very poor	Fair
173:												
Ryark	Poor	Fair	Fair	---	Poor	Fair	Very poor	Very poor	Fair	Poor	Very poor	Fair
Powderwash	Poor	Fair	Fair	---	---	Fair	Very poor	Very poor	Poor	Very poor	Very poor	Fair
174:												
Ryark	Poor	Fair	Fair	---	Poor	Fair	Very poor	Very poor	Fair	Poor	Very poor	Fair
Maybell	Poor	Poor	Fair	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Fair
175:												
Sandwash	Poor	Fair	Fair	---	---	Fair	Very poor	Very poor	Fair	---	Very poor	Fair
Langspring	Poor	Fair	Fair	---	---	Poor	Very poor	Very poor	Fair	---	Very poor	Fair
Baston	Very poor	Very poor	Very poor	---	---	Very poor	Very poor	Very poor	Very poor	---	Very poor	Very poor
176:												
Schooner	Very poor	Very poor	Fair	---	---	Fair	Very poor	Very poor	Very poor	---	Very poor	Fair
Rock outcrop	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
177:												
Schooner	Very poor	Very poor	Fair	---	---	Fair	Very poor	Very poor	Very poor	---	Very poor	Fair
Tricera	Poor	Poor	Fair	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Fair
178:												
Simanni	Poor	Poor	Poor	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Poor

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
178:												
Ruedloff	Poor	Poor	Poor	---	---	Poor	Very poor	Very poor	Poor	---	Very poor	Poor
179:												
Skyway, dry	Very poor	Very poor	Good	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Fair
180:												
Spool	Very poor	Very poor	Poor	---	---	Poor	Very poor	Very poor	Very poor	Very poor	Very poor	Poor
Maybell	Poor	Poor	Fair	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Fair
181:												
Stunner	Poor	Fair	Fair	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Fair
182:												
Stunner, moist	Fair	Fair	Good	---	Fair	Good	Poor	Very poor	Fair	Fair	Very poor	Good
Emlin	Poor	Fair	Fair	---	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor	Fair
183:												
Styers	Poor	Poor	Fair	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Fair
Ironsprings	Poor	Fair	Fair	---	---	Fair	Very poor	Very poor	Fair	---	Very poor	Fair
Maysprings	Poor	Poor	Fair	---	---	Good	Very poor	Very poor	Fair	---	Very poor	Fair
184:												
Styers	Poor	Poor	Fair	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Fair
Pinelli	Poor	Poor	Fair	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Fair
Taffom	Poor	Fair	Fair	---	---	Fair	Very poor	Very poor	Fair	---	Very poor	Fair

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
185:												
Taffom	Fair	Fair	Fair	---	---	Fair	Poor	Very poor	Fair	---	Very poor	Fair
186:												
Talamantes	Poor	Poor	Poor	---	---	Poor	Very poor	Very poor	Poor	---	Very poor	Poor
187:												
Talamantes	Poor	Poor	Poor	---	---	Poor	Very poor	Very poor	Poor	---	Very poor	Poor
188:												
Talamantes, saline	Very poor	Very poor	Very poor	---	---	Poor	Poor	Very poor	Very poor	---	Very poor	Very poor
189:												
Tipper	Very poor	Very poor	Poor	---	---	Poor	Very poor	Very poor	Very poor	---	Very poor	Poor
Crustown	Very poor	Very poor	Poor	---	Very poor	Poor	Very poor	Very poor	Very poor	Very poor	Very poor	Poor
190:												
Tipperary	Very poor	Very poor	Poor	---	---	Poor	Very poor	Very poor	Very poor	---	Very poor	Poor
191:												
Tipperary	Very poor	Very poor	Poor	---	---	Poor	Very poor	Very poor	Very poor	---	Very poor	Poor
192:												
Tipperary	Very poor	Very poor	Poor	---	---	Poor	Very poor	Very poor	Very poor	---	Very poor	Poor
Willwood	Poor	Poor	Poor	---	---	Poor	Very poor	Very poor	Poor	---	Very poor	Poor
193:												
Tisworth	Very poor	Very poor	Very poor	---	---	Fair	Poor	Very poor	Very poor	---	Very poor	Poor
194:												
Tolman	Very poor	Very poor	Poor	---	---	Good	Very poor	Very poor	Poor	---	Very poor	Fair

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
195:												
Duffymont	Very poor	Very poor	Poor	---	Poor	Fair	Very poor	Very poor	Very poor	Poor	Very poor	Poor
195:												
Torriorthents	Very poor	Very poor	Poor	---	---	Poor	Very poor	Very poor	Poor	---	Very poor	Poor
196:												
Torriorthents	Very poor	Very poor	Poor	---	---	Poor	Very poor	Very poor	Poor	---	Very poor	Poor
Baston	Very poor	Very poor	Very poor	---	---	Very poor	Very poor	Very poor	Very poor	---	Very poor	Very poor
197:												
Torriorthents	Very poor	Very poor	Poor	---	Poor	Fair	Very poor	Very poor	Poor	Poor	Very poor	Poor
Rock outcrop, sandstone	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
198:												
Torriorthents	Very poor	Very poor	Poor	---	---	Poor	Very poor	Very poor	Poor	---	Very poor	Poor
Rock outcrop, shale	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
199:												
Torriorthents	Very poor	Very poor	Poor	---	---	Poor	Very poor	Very poor	Very poor	---	Very poor	Poor
Torripsamments	Very poor	Very poor	Fair	---	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor	Poor
200:												
Tresano	Poor	Poor	Poor	---	---	Poor	Very poor	Very poor	Poor	---	Very poor	Poor
201:												
Tresano	Poor	Poor	Poor	---	---	Poor	Very poor	Very poor	Poor	---	Very poor	Poor

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
201:												
Hiatha	Poor	Poor	Fair	---	Very poor	Poor	Very poor	Very poor	Poor	Poor	Very poor	Poor
Kandaly	Poor	Poor	Poor	---	---	Good	---	---	Poor	---	---	Fair
202:												
Turzo	Poor	Poor	Poor	---	---	Fair	Poor	Very poor	Poor	---	Very poor	Fair
203:												
Turzo, saline	Poor	Poor	Poor	---	Very poor	Very poor	Poor	Very poor	Poor	Very poor	Very poor	Fair
204:												
Typic Natrargids	Very poor	Very poor	Very poor	---	Very poor	Poor	Poor	Very poor	Very poor	Very poor	Very poor	Very poor
205:												
Uffens	Very poor	Very poor	Very poor	---	---	Poor	Very poor	Very poor	Very poor	---	Very poor	Very poor
206:												
Ustorthents, frigid	Very poor	Very poor	Fair	---	Fair	Good	Very poor	Very poor	Poor	Fair	Very poor	Fair
Borolls	Very poor	Very poor	Good	---	Good	Good	Very poor	Very poor	Poor	Good	Very poor	Good
207:												
Vermillion	Poor	Poor	Poor	---	Poor	Fair	Very poor	Very poor	Poor	---	Very poor	Poor
Langspring	Poor	Fair	Fair	---	---	Poor	Very poor	Very poor	Fair	---	Very poor	Fair
208:												
Wallson	Poor	Poor	Fair	---	Very poor	Poor	Very poor	Very poor	Poor	Poor	Very poor	Poor
Tricera	Poor	Poor	Fair	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Fair

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
209:												
Weed	Poor	Fair	Fair	---	---	Good	Very poor	Very poor	Fair	---	---	Fair
210:												
Willwood	Poor	Poor	Poor	---	---	Poor	Very poor	Very poor	Poor	---	Very poor	Poor
Sheppard, cool	Poor	Poor	Poor	---	Very poor	Poor	Very poor	Very poor	Poor	Very poor	Very poor	Poor
211:												
Willwood	Poor	Poor	Poor	---	---	Poor	Very poor	Very poor	Poor	---	Very poor	Poor
Tipperary	Very poor	Very poor	Poor	---	---	Poor	Very poor	Very poor	Very poor	---	Very poor	Poor
212:												
Willwood	Poor	Poor	Poor	---	---	Poor	Very poor	Very poor	Poor	---	Very poor	Poor
Tipperary, cobbly substratum	Poor	Poor	Poor	---	---	Poor	Very poor	Very poor	Poor	---	Very poor	Poor
213:												
Winevada	Poor	Poor	Good	Good	---	Good	Very poor	Very poor	Fair	Good	Very poor	Good
Splitro	Poor	Poor	Fair	Poor	---	Good	Very poor	Very poor	Poor	Poor	Very poor	Good
214:												
Winevada	Very poor	Very poor	Good	Good	---	Good	Very poor	Very poor	Poor	Fair	Very poor	Good
Splitro	Very poor	Very poor	Fair	Poor	---	Good	Very poor	Very poor	Very poor	Poor	Very poor	Good
215:												
Winkleman	Very poor	Poor	Poor	---	---	Poor	Fair	Fair	Poor	---	Fair	Poor

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
216:												
Yamo	Fair	Fair	Fair	---	---	Fair	Very poor	Very poor	Fair	---	Very poor	Fair
217:												
Yamo	Poor	Poor	Fair	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Fair
218:												
Yellowwash	Poor	Poor	Poor	---	Very poor	Fair	Very poor	Very poor	Poor	Very poor	Very poor	Poor
Piezon	Poor	Fair	Fair	---	Poor	Fair	Very poor	Very poor	Fair	Poor	Very poor	Fair
219:												
Youga	Poor	Poor	Good	---	---	Fair	Poor	Very poor	Fair	---	Very poor	Fair
220:												
Youga	Poor	Poor	Good	---	Fair	Fair	Poor	Very poor	Poor	Fair	Very poor	Fair
Dinnen	Poor	Poor	Good	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Fair
221:												
Youga	Very poor	Very poor	Good	---	Fair	Fair	Very poor	Very poor	Very poor	Fair	Very poor	Fair
Gelkie	Very poor	Very poor	Fair	---	Fair	Good	Very poor	Very poor	Poor	Fair	Very poor	Fair
Clayburn, warm	Very poor	Very poor	Good	---	Good	Good	Very poor	Very poor	Poor	Fair	Very poor	Good
222:												
Youngston, cool	Poor	Poor	Poor	---	---	Poor	Poor	Very poor	Poor	---	Poor	Poor
223:												
Youngston, well drained	Poor	Poor	Poor	---	---	Poor	Poor	Very poor	Poor	---	Very poor	Poor

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
224:												
Zillion	Poor	Poor	Fair	---	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor	Fair
Barkelew, moist	Very poor	Very poor	Fair	---	---	Very poor	Very poor	Very poor	Poor	Very poor	Very poor	Poor
Grapit	Very poor	Very poor	Fair	---	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor	Fair
225:												
Abracon	Very poor	Very poor	Poor	---	Very poor	Poor	Poor	Very poor	Very poor	Poor	Very poor	Poor
Solirec	Very poor	Very poor	Poor	---	Very poor	Poor	Poor	Very poor	Very poor	Poor	Very poor	Poor
226:												
Arches	Very poor	Very poor	Very poor	---	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
Mespun	Very poor	Very poor	Poor	---	Very poor	Poor	Very poor	Very poor	Very poor	Poor	Very poor	Poor
Rock outcrop	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
227:												
Bankard family	Poor	Poor	Fair	---	Poor	Fair	Very poor	Very poor	Poor	---	Very poor	Fair
Cameo	Poor	Fair	Fair	---	---	Fair	Poor	Very poor	Fair	---	Very poor	Fair
228:												
Bondman	Poor	Poor	Fair	---	Poor	---	Very poor	Very poor	Poor	Poor	Very poor	---
Rock outcrop	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
229:												
Cameo	Poor	Fair	Fair	---	---	Fair	Poor	Very poor	Fair	---	Very poor	Fair

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
230:												
Cragnot	Very poor	Very poor	Fair	---	Poor	---	Very poor	Very poor	Poor	Poor	Very poor	---
Pensore	Very poor	Very poor	Poor	---	Very poor	---	Very poor	Very poor	Very poor	Very poor	Very poor	---
Grapit	Very poor	Very poor	Fair	---	Poor	Fair	Very poor	Very poor	Poor	Poor	Very poor	---
231:												
Green River	Very poor	Very poor	Very poor	---	Very poor	Very poor	Fair	Fair	Very poor	Very poor	Fair	Very poor
Fluvaquents	Poor	Poor	Poor	---	---	Good	Good	Fair	Poor	---	Fair	Fair
232:												
Lakebench	Poor	Poor	Fair	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Fair
Strell	Very poor	Very poor	Poor	---	Very poor	Fair	Very poor	Very poor	Very poor	Very poor	Very poor	---
233:												
Lakebench	Poor	Poor	Fair	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Fair
Yampa	Poor	Poor	Fair	---	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor	---
234:												
Mantlemine	Poor	Fair	Fair	---	---	Fair	Poor	Very poor	Fair	---	Very poor	Fair
235:												
Mantlemine	Poor	Fair	Fair	---	---	Fair	Poor	Very poor	Fair	---	Very poor	Fair
Emlin	Poor	Fair	Fair	---	Fair	Fair	Poor	Very poor	Fair	Fair	Very poor	Fair
236:												
Mido	Poor	Fair	Fair	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Fair

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
237:												
Mikim loam	Very poor	Very poor	Poor	---	Very poor	Poor	Poor	Very poor	Very poor	Poor	Very poor	Poor
Mikim silt loam	Very poor	Very poor	Very poor	---	Very poor	Very poor	Poor	Very poor	Very poor	Very poor	Very poor	Very poor
238:												
Milok	Poor	Fair	Fair	---	Very poor	Fair	Very poor	Very poor	Fair	Poor	Very poor	Fair
239:												
Milok	Very poor	Very poor	Fair	---	Poor	Poor	Very poor	Very poor	Poor	Poor	Very poor	Poor
Solirec	Very poor	Very poor	Fair	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Fair
Strych	Very poor	Very poor	Fair	---	Poor	---	Very poor	Very poor	Poor	Poor	Very poor	---
240:												
Milok	Very poor	Very poor	Poor	---	Very poor	Poor	Very poor	Very poor	Very poor	Poor	Very poor	Poor
Strych	Very poor	Very poor	Poor	---	Very poor	Poor	Very poor	Very poor	Very poor	Poor	Very poor	Poor
241:												
Pensore	Very poor	Very poor	Poor	---	Very poor	---	Very poor	Very poor	Very poor	Very poor	Very poor	---
Roto	Very poor	Very poor	Poor	---	Very poor	---	Very poor	Very poor	Very poor	Very poor	Very poor	---
242:												
Riverwash	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Poor	Very poor	Very poor	Poor	Very poor
243:												
Rizno	Very poor	Very poor	Poor	---	Very poor	---	Very poor	Very poor	Very poor	Very poor	Very poor	---
Windcomb	Very poor	Very poor	Very poor	---	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herba-ceous plants	Hard-wood trees	Conif-erous plants	Shrubs	Wetland plants	Shallow water areas	Open-land wild-life	Wood-land wild-life	Wetland wild-life	Range-land wild-life
243:												
Anasazi	Poor	Poor	Fair	---	Poor	---	Very poor	Very poor	Poor	Poor	Very poor	---
244:												
Rock outcrop	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
Hackling	Very poor	Very poor	Poor	---	Very poor	Good	Very poor	Very poor	Very poor	Very poor	Very poor	Fair
245:												
Rock outcrop	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
Torriorthents	Very poor	Very poor	Poor	---	---	Poor	Very poor	Very poor	Poor	---	Very poor	Poor
Ustorthents	Very poor	Very poor	Fair	---	---	Good	Very poor	Very poor	Poor	---	Very poor	Fair
246:												
Schoonover	Poor	Poor	Poor	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Poor
Duffymont	Very poor	Very poor	Poor	---	Very poor	Poor	Very poor	Very poor	Very poor	Poor	Very poor	Poor
247:												
Stout	Very poor	Very poor	Poor	---	Very poor	Fair	Very poor	Very poor	Very poor	Very poor	Very poor	---
Rock outcrop	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
248:												
Strych	Poor	Poor	Fair	---	Poor	---	Very poor	Very poor	Poor	Poor	Very poor	---
Mellenthin	Very poor	Very poor	Poor	---	Very poor	---	Very poor	Very poor	Very poor	Very poor	Very poor	---
249:												
Zillion	Very poor	Very poor	Fair	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Fair

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
249:												
Yampa	Very poor	Very poor	Fair	---	---	Fair	Very poor	Very poor	Poor	---	Very poor	Fair
Clyl	Poor	Poor	Fair	---	Poor	Fair	Very poor	Very poor	Poor	Fair	Very poor	Fair
250:												
Abracon	Very poor	Very poor	Poor	---	Very poor	Poor	Poor	Very poor	Very poor	Poor	Very poor	Poor
251:												
Badland	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
Renegade	Very poor	Very poor	Fair	---	Poor	Fair	Very poor	Very poor	Fair	Fair	Very poor	Fair
252:												
Bigtom	Very poor	Very poor	Fair	---	Poor	Fair	Very poor	Very poor	Poor	Fair	Very poor	Fair
Namlot	Very poor	Very poor	Very poor	---	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
Dokie	Very poor	Very poor	Fair	---	Poor	Fair	Very poor	Very poor	Poor	Fair	Very poor	Fair
253:												
Clapper	Very poor	Very poor	Poor	---	Very poor	Poor	Very poor	Very poor	Very poor	Poor	Very poor	Poor
254:												
Cliff	Very poor	Very poor	Poor	---	Very poor	Poor	Very poor	Very poor	Very poor	Poor	Very poor	Poor
255:												
Clyl	Poor	Poor	Fair	---	Poor	Fair	Very poor	Very poor	Poor	Fair	Very poor	Fair
Pinerid	Very poor	Very poor	Very poor	---	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herba-ceous plants	Hard-wood trees	Conif-erous plants	Shrubs	Wetland plants	Shallow water areas	Open-land wild-life	Wood-land wild-life	Wetland wild-life	Range-land wild-life
256:												
Cortyzack	Poor	Fair	Fair	---	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor	Fair
Diagulch	Poor	Fair	Fair	---	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor	Fair
257:												
Cortyzack	Poor	Fair	Fair	---	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor	Fair
Duffymont	Very poor	Very poor	Poor	---	Very poor	Poor	Very poor	Very poor	Very poor	Poor	Very poor	Poor
258:												
Cortyzack	Poor	Fair	Fair	---	Fair	Fair	Very poor	Very poor	Fair	Fair	Very poor	Fair
Flynncove	Poor	Poor	Fair	---	Poor	Fair	Very poor	Very poor	Poor	Fair	Very poor	Fair
259:												
Denco	Very poor	Very poor	Poor	---	Very poor	Poor	Very poor	Very poor	Very poor	Poor	Very poor	Poor
Gerst	Very poor	Very poor	Very poor	---	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
260:												
Dokie	Very poor	Very poor	Fair	---	Poor	Fair	Very poor	Very poor	Poor	Fair	Very poor	Fair
Flynncove	Very poor	Very poor	Poor	---	Very poor	Poor	Very poor	Very poor	Very poor	Poor	Very poor	Poor
261:												
Dokie	Very poor	Very poor	Fair	---	Poor	Fair	Very poor	Very poor	Poor	Fair	Very poor	Fair
Namlot	Very poor	Very poor	Very poor	---	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
262:												
Gompers	Very poor	Very poor	Very poor	---	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
263:												
Hanksville	Very poor	Very poor	Very poor	---	Very poor	Poor	Very poor	Very poor	Very poor	Poor	Very poor	Very poor
264:												
Mikim	Very poor	Very poor	Poor	---	Very poor	Poor	Poor	Very poor	Very poor	Poor	Very poor	Poor
265:												
Mikim	Very poor	Very poor	Very poor	---	Very poor	Very poor	Poor	Very poor	Very poor	Very poor	Very poor	Very poor
266:												
Rock outcrop	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
Boxring	Very poor	Very poor	Very poor	---	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
Tridell	Very poor	Very poor	Poor	---	Very poor	Poor	Very poor	Very poor	Very poor	Poor	Very poor	Poor
267:												
Solirec	Very poor	Very poor	Poor	---	Very poor	Poor	Poor	Very poor	Very poor	Poor	Very poor	Poor
Abracon	Very poor	Very poor	Poor	---	Very poor	Poor	Poor	Very poor	Very poor	Poor	Very poor	Poor
Begay	Very poor	Very poor	Poor	---	Very poor	Poor	Very poor	Very poor	Very poor	Poor	Very poor	Poor
268:												
Toliver	Very poor	Very poor	Poor	---	Poor	Poor	Very poor	Very poor	Very poor	Poor	Very poor	Poor
Rock outcrop	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
269:												
Walknolls	Very poor	Very poor	Very poor	---	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
Badland	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor

Table 10.--Wildlife habitat--Continued

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herbaceous plants	Hardwood trees	Coniferous plants	Shrubs	Wetland plants	Shallow water areas	Openland wildlife	Woodland wildlife	Wetland wildlife	Rangeland wildlife
269:												
Rock outcrop	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
270:												
Walknolls	Very poor	Very poor	Very poor	---	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
Gilston	Poor	Very poor	Poor	---	Very poor	Poor	Very poor	Very poor	Poor	Poor	Very poor	Poor
271:												
Water	---	---	---	---	---	---	---	---	---	---	---	---

Table 11.--Building site development--Dwellings without basements, dwellings with basements, and small commercial buildings

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1:							
Abor	85	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Shrink-swell	1.00
				Depth to soft bedrock	0.03		
2:							
Abor	80	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
				Depth to soft bedrock	0.03		
3:							
Adderton	90	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
						Slope	0.50
4:							
Almy	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.04	Slope	0.04	Slope	1.00
5:							
Apmay	90	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	0.07	Depth to saturated zone	1.00	Depth to saturated zone	0.07
6:							
Avalon	45	Not limited		Not limited		Somewhat limited	
						Slope	0.88
Mack	45	Not limited		Not limited		Somewhat limited	
						Slope	0.88
7:							
Avalon	30	Not limited		Not limited		Somewhat limited	
						Slope	0.88
Persayo, moist	25	Very limited		Very limited		Very limited	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Depth to soft bedrock	1.00
Degater	20	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Shrink-swell	1.00
				Depth to soft bedrock	0.01		
8:							
Badland	90	Not rated		Not rated		Not rated	

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
9:							
Baroid	55	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
Eghelm	35	Very limited Flooding	1.00	Very limited Flooding Depth to saturated zone	1.00 0.03	Very limited Flooding	1.00
10:							
Battlement	85	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
11:							
Battlement, saline--	80	Very limited Flooding	1.00	Very limited Flooding Depth to saturated zone	1.00 0.47	Very limited Flooding	1.00
12:							
Berlake	85	Not limited		Not limited		Very limited Slope	1.00
13:							
Berlake	85	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
14:							
Berlake	55	Not limited		Not limited		Very limited Slope	1.00
Maysprings	30	Not limited		Not limited		Very limited Slope	1.00
15:							
Berlake	35	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Taffom	30	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Gretdivid	15	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
16:							
Bilhil	85	Very limited Shrink-swell	1.00	Very limited Shrink-swell Depth to saturated zone	1.00 0.61	Very limited Shrink-swell	1.00
17:							
Binco	90	Very limited Slope Shrink-swell	1.00 1.00	Very limited Slope Shrink-swell	1.00 1.00	Very limited Slope Shrink-swell	1.00 1.00

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
18:							
Boltus	50	Very limited		Very limited		Very limited	
		Depth to soft bedrock	1.00	Shrink-swell	1.00	Depth to soft bedrock	1.00
		Shrink-swell	1.00	Depth to soft bedrock	1.00	Shrink-swell	1.00
						Slope	0.88
Beamton	25	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	0.88
				Depth to soft bedrock	0.20	Shrink-swell	0.50
19:							
Borollic Natrargids	40	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
Borollic Haplargids	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
		Shrink-swell	0.50			Shrink-swell	0.50
Ustic Torrifluvents	25	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
				Depth to saturated zone	0.35		
20:							
Brownsto	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
Castee	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
21:							
Bulkley	80	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
22:							
Bulkley	80	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
						Slope	1.00
23:							
Bulkley	90	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Shrink-swell	1.00
24:							
Bulkley	60	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Shrink-swell	1.00
Quilt	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
25:							
Campspass	90	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
						Shrink-swell	0.50
26:							
Campspass	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
27:							
Canlodore	95	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.45	Content of large stones	0.45	Content of large stones	0.45
28:							
Carbol	40	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
						Slope	0.50
Irigul	25	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Slope	0.96	Slope	0.96	Slope	1.00
Rock outcrop	25	Not rated		Not rated		Not rated	
29:							
Carbol	45	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
						Slope	1.00
Miracle	30	Somewhat limited		Very limited		Very limited	
		Depth to hard bedrock	0.03	Depth to hard bedrock	1.00	Slope	1.00
						Depth to hard bedrock	0.03
30:							
Carmody	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Depth to soft bedrock	0.95	Slope	1.00
				Slope	0.37		
Rock River	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Slope	0.37	Slope	1.00
Crestman	20	Somewhat limited		Very limited		Very limited	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
		Slope	0.37	Slope	0.37	Slope	1.00
31:							
Castee	90	Not limited		Not limited		Very limited	
						Slope	1.00

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
32:							
Chroder	80	Not limited		Not limited		Very limited	
						Slope	1.00
33:							
Clayburn, warm	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
34:							
Clayburn	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Foidel	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Shrink-swell	0.50		
35:							
Clayburn	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
Youga, moist	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
36:							
Clifsand	60	Somewhat limited		Somewhat limited		Very limited	
		Content of large stones	0.27	Content of large stones	0.27	Slope	1.00
						Content of large stones	0.27
Chroder	30	Not limited		Not limited		Very limited	
						Slope	1.00
37:							
Cochetopa	85	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Shrink-swell	1.00
38:							
Cochetopa	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
39:							
Cochetopa, warm	85	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
						Slope	1.00
40:							
Cochetopa	45	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Slope	1.00
		Slope	0.84	Slope	0.84	Shrink-swell	1.00
Gothic	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
		Content of large stones	0.01	Content of large stones	0.01	Content of large stones	0.01

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
41:							
Cochetopa	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
Gothic	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
42:							
Cochetopa	50	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
		Slope	0.04	Slope	0.04	Slope	1.00
Jerry	35	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
		Slope	0.04	Slope	0.04	Slope	1.00
43:							
Coldspring, moist	80	Not limited		Somewhat limited		Very limited	
				Depth to hard bedrock	0.71	Slope	1.00
44:							
Cowestglen	80	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
45:							
Coyet	90	Not limited		Not limited		Very limited	
						Slope	1.00
46:							
Coyet	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
47:							
Coyet	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Crestman, moist	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
48:							
Crago	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Pensore	35	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
Grapit	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.01	Content of large stones	0.01	Content of large stones	0.01

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
49:							
Cryoborolls, slumped	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
50:							
Cushool	85	Not limited		Somewhat limited		Very limited	
				Depth to soft bedrock	0.84	Slope	1.00
51:							
Cushool	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.84		
52:							
Danavore	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.34	Depth to soft bedrock	0.97	Content of large stones	0.34
				Content of large stones	0.34		
Waybe	30	Very limited		Very limited		Very limited	
		Depth to soft bedrock	1.00	Shrink-swell	1.00	Depth to soft bedrock	1.00
		Shrink-swell	1.00	Depth to soft bedrock	1.00	Shrink-swell	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
53:							
Davtone	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Forsey	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
54:							
Deaver	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
				Depth to soft bedrock	0.46		
Avalon	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.04	Slope	0.04	Slope	1.00
55:							
Deaver	60	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.10		

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
55:							
Chipeta	30	Very limited		Very limited		Very limited	
		Depth to soft bedrock	1.00	Shrink-swell	1.00	Depth to soft bedrock	1.00
		Shrink-swell	1.00	Depth to soft bedrock	1.00	Shrink-swell	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
56:							
Debone	90	Somewhat limited		Not limited		Somewhat limited	
		Shrink-swell	0.50			Shrink-swell	0.50
57:							
Detra	50	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	0.88
						Shrink-swell	0.50
Cortyzack	40	Not limited		Not limited		Somewhat limited	
						Slope	0.88
58:							
Diaflats	45	Somewhat limited		Very limited		Very limited	
		Depth to hard bedrock	0.79	Depth to hard bedrock	1.00	Slope	1.00
		Slope	0.04	Slope	0.04	Depth to hard bedrock	0.79
Fondillas	35	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Content of large stones	0.25	Content of large stones	0.25	Slope	1.00
		Slope	0.04	Slope	0.04	Content of large stones	0.25
59:							
Dranyon	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
60:							
Dumps, mine	100	Not rated		Not rated		Not rated	
61:							
Ecklund	50	Somewhat limited		Very limited		Somewhat limited	
		Depth to hard bedrock	0.06	Depth to hard bedrock	1.00	Slope	0.88
						Depth to hard bedrock	0.06
Tipperary	40	Not limited		Not limited		Somewhat limited	
						Slope	0.88
62:							
Eghelm	90	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
63:							
Eghelm, moist	90	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
				Depth to saturated zone	0.03		

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
64:							
Emlin	85	Not limited		Not limited		Somewhat limited	
						Slope	0.88
65:							
Emlin	65	Somewhat limited		Not limited		Somewhat limited	
		Shrink-swell	0.50			Slope	0.50
						Shrink-swell	0.50
Tymosling	20	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
		Slope	0.16	Slope	0.16	Slope	1.00
				Depth to soft bedrock	0.10		
66:							
Evanot	90	Not limited		Not limited		Somewhat limited	
						Slope	0.88
67:							
Evanot	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
68:							
Evanot	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
Yamo	25	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
69:							
Fenster	45	Not limited		Not limited		Very limited	
						Slope	1.00
Thenipel	30	Not limited		Not limited		Very limited	
						Slope	1.00
70:							
Fluvaquents, frequently flooded	50	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
Haplaquolls, frequently flooded	45	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Shrink-swell	0.50			Shrink-swell	0.50
71:							
Flygare, dry	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.11	Content of large stones	0.11	Content of large stones	0.11

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
72:							
Foidel, cool--------	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
				Shrink-swell	0.50		
73:							
Foidel----------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Shrink-swell	0.50		
74:							
Foidel, moist-------	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
Flygare----------	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
		Content of large stones	0.11	Content of large stones	0.11	Content of large stones	0.11
Skyway, moist-------	20	Somewhat limited		Very limited		Very limited	
		Slope	0.96	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.35	Slope	0.96	Depth to hard bedrock	0.35
75:							
Fonce----------	90	Not limited		Not limited		Somewhat limited	
						Slope	0.12
76:							
Fonce----------	90	Not limited		Not limited		Very limited	
						Slope	1.00
77:							
Forelle----------	85	Not limited		Not limited		Very limited	
						Slope	1.00
78:							
Forelle----------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
79:							
Forelle----------	50	Not limited		Not limited		Somewhat limited	
						Slope	0.88
Evanot----------	40	Not limited		Not limited		Somewhat limited	
						Slope	0.88
80:							
Forelle----------	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Evanot----------	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
81:							
Forelle----------	40	Somewhat limited		Not limited		Somewhat limited	
		Shrink-swell	0.50			Shrink-swell	0.50
						Slope	0.12

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
81:							
Obadia	35	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
						Slope	0.12
82:							
Forelle	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.84	Slope	0.84	Slope	1.00
Pinelli	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.84	Slope	0.84	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
Maysprings	15	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.84	Slope	0.84	Slope	1.00
83:							
Forsey	50	Very limited		Very limited		Very limited	
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
		Slope	0.96	Slope	0.96	Slope	1.00
Libeg	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.04	Slope	0.04	Slope	1.00
		Content of large stones	0.01	Content of large stones	0.01	Content of large stones	0.01
84:							
Gebson, moist	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Youga	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.16	Slope	0.16	Slope	1.00
85:							
Giarch	90	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
				Depth to saturated zone	0.15		
86:							
Gracot	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Maybell	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
87:							
Gretdivid	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Taffom	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Abor	15	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Shrink-swell	1.00
				Depth to soft bedrock	0.46		

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
88:							
Grieves	85	Not limited		Not limited		Somewhat limited	
						Slope	0.88
89:							
Grieves	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
90:							
Grieves	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Crestman	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
91:							
Grieves	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Yamo	25	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.04	Slope	0.04	Slope	1.00
Crestman	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
92:							
Grimm	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.89	Content of large stones	0.89	Content of large stones	0.89
Ustic Torriorthents, shallow	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
93:							
Gullied land	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
						Slope	1.00
94:							
Hapney, moist	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
				Depth to saturated zone	0.15		
95:							
Haterton	60	Somewhat limited		Very limited		Very limited	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
						Slope	1.00

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
95:							
Piezon	30	Not limited		Somewhat limited		Very limited	
				Depth to soft bedrock	0.95	Slope	1.00
96:							
Heathcoat	85	Somewhat limited		Not limited		Somewhat limited	
		Shrink-swell	0.50			Shrink-swell	0.50
97:							
Heathcoat	60	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.84	Slope	0.84	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
Clayburn	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
98:							
Herm	50	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Shrink-swell	1.00
Fughes	35	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Shrink-swell	1.00
		Content of large stones	0.01	Content of large stones	0.01	Content of large stones	0.01
99:							
Hesperus, dry	85	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
		Slope	0.04	Slope	0.04	Shrink-swell	0.50
100:							
Hesperus	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
101:							
Hesperus	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
102:							
Holter	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.86	Content of large stones	0.86	Content of large stones	0.86
Detra	30	Somewhat limited		Not limited		Somewhat limited	
		Shrink-swell	0.50			Slope	0.88
						Shrink-swell	0.50
103:							
Iles	85	Very limited		Not limited		Very limited	
		Shrink-swell	1.00			Shrink-swell	1.00
						Slope	1.00

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
104:							
Ironco	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
Mulgon, dry	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
105:							
Ironsprings	85	Not limited		Not limited		Very limited	
						Slope	1.00
106:							
Ironsprings	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
107:							
Ironsprings	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Maysprings	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Gretdivid	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
108:							
Jerry	50	Very limited		Very limited		Very limited	
		Slope	1.00	Shrink-swell	1.00	Slope	1.00
		Shrink-swell	0.50	Slope	1.00	Shrink-swell	0.50
Cochetopa	35	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
109:							
Joebas	60	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
Rock outcrop	30	Not rated		Not rated		Not rated	
110:							
Kemmerer	80	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Shrink-swell	1.00
				Depth to soft bedrock	0.97		
111:							
Kemmerer	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
				Depth to soft bedrock	0.74		

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
111:							
Grapit	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.06	Content of large stones	0.06	Content of large stones	0.06
112:							
Kemmerer	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
				Depth to soft bedrock	0.97		
Moyerson	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to soft bedrock	1.00	Shrink-swell	1.00	Depth to soft bedrock	1.00
		Shrink-swell	1.00	Depth to soft bedrock	1.00	Shrink-swell	1.00
113:							
Kemmerer	60	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.97		
Yamo	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
114:							
Lamphier	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
115:							
Lamphier	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
116:							
Lamphier	45	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
Jerry	30	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
		Slope	0.96	Slope	0.96	Slope	1.00
117:							
Lamphier	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Jerry	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
118:							
Lander	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Shrink-swell	0.50	Depth to saturated zone	0.95	Shrink-swell	0.50
				Shrink-swell	0.50		

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
119:							
Langspring----------	85	Not limited		Not limited		Very limited	
						Slope	1.00
120:							
Layoint-------------	35	Somewhat limited		Very limited		Somewhat limited	
		Depth to hard bedrock	0.29	Depth to hard bedrock	1.00	Depth to hard bedrock	0.29
						Slope	0.12
Moosed--------------	25	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Slope	0.37	Slope	0.37	Slope	1.00
Berlake-------------	20	Not limited		Not limited		Very limited	
						Slope	1.00
121:							
Leaps---------------	90	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
		Slope	0.04	Slope	0.04	Slope	1.00
122:							
Leswill-------------	50	Not limited		Not limited		Not limited	
Rogrube-------------	30	Not limited		Not limited		Not limited	
123:							
Lilsnake------------	45	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Slope	0.63	Slope	0.63	Slope	1.00
Sandwash------------	30	Somewhat limited		Very limited		Somewhat limited	
		Content of large stones	0.75	Depth to hard bedrock	1.00	Slope	0.88
		Depth to hard bedrock	0.10	Content of large stones	0.75	Content of large stones	0.75
						Depth to hard bedrock	0.10
124:							
Losee---------------	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.84	Content of large stones	0.84	Content of large stones	0.84
Thornburgh, dry-----	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
125:							
Massadona-----------	85	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
						Slope	0.50

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
126:							
Massadona	65	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
						Slope	0.12
Youngston, moist	20	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
127:							
Maudlin	50	Somewhat limited		Very limited		Very limited	
		Depth to hard bedrock	0.46	Depth to hard bedrock	1.00	Slope	1.00
						Depth to hard bedrock	0.46
		Slope	0.04	Slope	0.04		
Duffymont	30	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
		Slope	0.04	Slope	0.04	Slope	1.00
128:							
Maybell	90	Not limited		Not limited		Very limited	
						Slope	1.00
129:							
Maybell	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
130:							
Maysprings	85	Not limited		Not limited		Very limited	
						Slope	1.00
131:							
Maysprings	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Gretdivid	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
132:							
Milren	80	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
						Slope	0.12
133:							
Miracle	50	Somewhat limited		Very limited		Very limited	
		Depth to hard bedrock	0.03	Depth to hard bedrock	1.00	Slope	1.00
						Depth to hard bedrock	0.03
Coldspring	30	Not limited		Somewhat limited		Very limited	
				Depth to hard bedrock	0.71	Slope	1.00
134:							
Morapos	85	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
						Slope	1.00

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
135:							
Morapos	85	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Shrink-swell	1.00
136:							
Morapos	40	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
						Slope	0.88
Pagoda	40	Very limited		Somewhat limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	0.50	Shrink-swell	1.00
						Slope	0.88
137:							
Morset	50	Not limited		Not limited		Very limited	
						Slope	1.00
Youga	30	Not limited		Not limited		Very limited	
						Slope	1.00
138:							
Moyerson	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to soft bedrock	1.00	Shrink-swell	1.00	Depth to soft bedrock	1.00
		Shrink-swell	1.00	Depth to soft bedrock	1.00	Shrink-swell	1.00
Rentsac	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Content of large stones	0.08	Content of large stones	0.08	Content of large stones	0.08
139:							
Muggins	85	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
		Slope	0.63	Slope	0.63	Slope	1.00
140:							
Ninot	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Crago	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Garlips	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
141:							
Nortez, cool	50	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
		Depth to hard bedrock	0.46	Depth to hard bedrock	1.00	Slope	1.00
						Depth to hard bedrock	0.46

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
141:							
Morapos	40	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
						Slope	1.00
142:							
Nortez, cool	50	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Slope	1.00
		Slope	1.00	Depth to hard bedrock	1.00	Shrink-swell	1.00
		Depth to hard bedrock	0.46	Slope	1.00	Depth to hard bedrock	0.46
Morapos	40	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Shrink-swell	1.00
143:							
Nunemaker	90	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
						Slope	1.00
144:							
Pagoda	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
145:							
Pagoda	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	0.88
						Shrink-swell	0.50
146:							
Pavillion	60	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
				Depth to soft bedrock	0.06		
Degater	25	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
		Slope	0.63	Slope	0.63	Slope	1.00
				Depth to soft bedrock	0.46		
147:							
Peeler	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
148:							
Pilotpeak	45	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
						Slope	1.00
Grubrob	35	Somewhat limited		Very limited		Somewhat limited	
		Depth to hard bedrock	0.64	Depth to hard bedrock	1.00	Depth to hard bedrock	0.64

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
149:							
Pinelli	85	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
						Shrink-swell	0.50
150:							
Pinelli	85	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
		Slope	0.04	Slope	0.04	Shrink-swell	0.50
151:							
Pinelli, dry	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	0.50
						Shrink-swell	0.50
152:							
Pinridge	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
						Slope	0.88
153:							
Pricecreek	85	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
154:							
Quealman	90	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
155:							
Rencot	50	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
		Slope	0.84	Slope	0.84	Slope	1.00
Duffymont	30	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
		Slope	0.84	Slope	0.84	Slope	1.00
156:							
Rentsac	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Content of large stones	0.03	Content of large stones	0.03	Content of large stones	0.03
157:							
Rentsac	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Content of large stones	0.12	Content of large stones	0.12	Content of large stones	0.12

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
157:							
Moyerson	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to soft bedrock	1.00	Shrink-swell	1.00	Depth to soft bedrock	1.00
		Shrink-swell	1.00	Depth to soft bedrock	1.00	Shrink-swell	1.00
158:							
Rock outcrop	70	Not rated		Not rated		Not rated	
Earsman	20	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00	Content of large stones	1.00
159:							
Rock outcrop	50	Not rated		Not rated		Not rated	
Haploborolls	35	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.90	Slope	1.00	Depth to hard bedrock	0.90
160:							
Rock outcrop	70	Not rated		Not rated		Not rated	
Torriorthents	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Content of large stones	0.79	Content of large stones	0.79	Content of large stones	0.79
161:							
Rock River	85	Not limited		Not limited		Not limited	
162:							
Rock River	85	Not limited		Not limited		Very limited	
						Slope	1.00
163:							
Rock River	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
164:							
Rock River	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
Taffom	25	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Slope	1.00
165:							
Rogrube sandy loam	50	Not limited		Not limited		Very limited	
						Slope	1.00

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
165:							
Rogrube clay loam	25	Not limited		Not limited		Very limited	
						Slope	1.00
166:							
Routt	80	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
				Shrink-swell	0.50		
167:							
Routt	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Shrink-swell	0.50		
Cochetopa	25	Very limited		Very limited		Very limited	
		Slope	1.00	Shrink-swell	1.00	Slope	1.00
				Slope	1.00		
Binco	20	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Shrink-swell	1.00
168:							
Ruedloff	85	Not limited		Not limited		Somewhat limited	
						Slope	0.12
169:							
Ruedloff	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Dunul	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
170:							
Ryan Park	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.04	Slope	0.04	Slope	1.00
171:							
Ryan Park	85	Not limited		Not limited		Not limited	
172:							
Ryan Park	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Coyet	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
173:							
Ryark	65	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.04	Slope	0.04	Slope	1.00
Powderwash	20	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
		Slope	0.04	Slope	0.04	Slope	1.00
				Depth to soft bedrock	0.01		

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
174:							
Ryark	70	Not limited		Not limited		Somewhat limited Slope	0.88
Maybell	15	Not limited		Not limited		Somewhat limited Slope	0.88
175:							
Sandwash	40	Somewhat limited Depth to hard bedrock	0.97	Very limited Depth to hard bedrock	1.00	Somewhat limited Depth to hard bedrock	0.97
Langspring	30	Not limited		Not limited		Not limited	
Baston	20	Very limited Shrink-swell	1.00	Very limited Shrink-swell Depth to soft bedrock	1.00 0.64	Very limited Shrink-swell	1.00
176:							
Schooner	50	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00
Rock outcrop	35	Not rated		Not rated		Not rated	
177:							
Schooner	55	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00
Tricera	25	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16	Very limited Slope	1.00
178:							
Simanni	50	Not limited		Not limited		Somewhat limited Slope	0.50
Ruedloff	40	Not limited		Not limited		Somewhat limited Slope	0.50
179:							
Skyway, dry	85	Very limited Slope Depth to hard bedrock	1.00 0.35	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 0.35
180:							
Spool	55	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00
Maybell	30	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16	Very limited Slope	1.00

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
181:							
Stunner	90	Not limited		Not limited		Somewhat limited	
						Slope	0.12
182:							
Stunner, moist	55	Not limited		Not limited		Somewhat limited	
						Slope	0.88
Emlin	35	Not limited		Not limited		Somewhat limited	
						Slope	0.88
183:							
Styers	45	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Shrink-swell	1.00
				Depth to soft bedrock	0.10		
Ironsprings	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Maysprings	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
184:							
Styers	40	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Shrink-swell	1.00
				Depth to soft bedrock	0.64		
Pinelli	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
Taffom	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
185:							
Taffom	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.04	Slope	0.04	Slope	1.00
186:							
Talamantes	85	Not limited		Not limited		Not limited	
187:							
Talamantes	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Slope	0.37	Slope	1.00
188:							
Talamantes, saline	85	Not limited		Not limited		Not limited	
189:							
Tipper	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.64		

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
189:							
Crustown	35	Very limited		Very limited		Very limited	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Depth to soft bedrock	1.00
190:							
Tipperary	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.84	Slope	0.84	Slope	1.00
191:							
Tipperary	90	Not limited		Not limited		Very limited	
						Slope	1.00
192:							
Tipperary	50	Not limited		Not limited		Somewhat limited	
						Slope	0.88
Willwood	40	Not limited		Not limited		Somewhat limited	
						Slope	0.88
193:							
Tisworth	85	Not limited		Not limited		Somewhat limited	
						Slope	0.12
194:							
Tolman	50	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00	Content of large stones	1.00
Duffymont	35	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00	Content of large stones	1.00
195:							
Torriorthents	95	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00	Depth to soft bedrock	1.00
		Content of large stones	0.54	Content of large stones	0.54	Content of large stones	0.54
196:							
Torriorthents	50	Somewhat limited		Very limited		Very limited	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
		Content of large stones	0.54	Content of large stones	0.54	Slope	1.00
						Content of large stones	0.54

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
196:							
Baston	35	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
				Depth to soft bedrock	0.64	Slope	1.00
197:							
Torriorthents	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
		Content of large stones	0.66	Content of large stones	0.66	Content of large stones	0.66
Rock outcrop, sandstone	30	Not rated		Not rated		Not rated	
198:							
Torriorthents	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
Rock outcrop, shale	40	Not rated		Not rated		Not rated	
199:							
Torriorthents	60	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00	Depth to soft bedrock	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
Torripsamments	30	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.79	Slope	1.00	Depth to hard bedrock	0.79
				Depth to soft bedrock	0.79		
200:							
Tresano	80	Not limited		Not limited		Very limited	
						Slope	1.00
201:							
Tresano	35	Not limited		Not limited		Somewhat limited	
						Slope	0.88
Hiatha	30	Very limited		Very limited		Very limited	
		Depth to soft bedrock	1.00	Shrink-swell	1.00	Depth to soft bedrock	1.00
		Shrink-swell	1.00	Depth to soft bedrock	1.00	Shrink-swell	1.00
		Slope	0.84	Slope	0.84	Slope	1.00

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
201:							
Kandaly	15	Not limited		Not limited		Somewhat limited	
						Slope	0.88
202:							
Turzo	90	Not limited		Not limited		Not limited	
203:							
Turzo, saline	90	Not limited		Not limited		Somewhat limited	
						Slope	0.12
204:							
Typic Natrargids	80	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
205:							
Uffens	90	Not limited		Not limited		Not limited	
206:							
Ustorthents, frigid	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00	Depth to hard bedrock	1.00	Content of large stones	1.00
		Depth to hard bedrock	0.64	Content of large stones	1.00	Depth to hard bedrock	0.64
				Depth to soft bedrock	0.64		
Borolls	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	0.10	Depth to hard bedrock	1.00	Depth to hard bedrock	0.10
				Depth to soft bedrock	0.10		
207:							
Vermillion	40	Somewhat limited		Very limited		Very limited	
		Slope	0.96	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.64	Slope	0.96	Depth to hard bedrock	0.64
Langspring	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
208:							
Wallson	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.04	Slope	0.04	Slope	1.00
Tricera	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.04	Slope	0.04	Slope	1.00
209:							
Weed	85	Not limited		Not limited		Somewhat limited	
						Slope	0.88

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
210:							
Willwood	55	Somewhat limited		Very limited		Very limited	
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
						Slope	0.88
Sheppard, cool	35	Not limited		Not limited		Somewhat limited	
						Slope	0.88
211:							
Willwood	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
Tipperary	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
212:							
Willwood	60	Somewhat limited		Somewhat limited		Somewhat limited	
		Content of large stones	0.95	Content of large stones	0.95	Content of large stones	0.95
						Slope	0.88
Tipperary, cobbly substratum	25	Not limited		Not limited		Somewhat limited	
						Slope	0.88
213:							
Winevada	60	Somewhat limited		Very limited		Very limited	
		Slope	0.96	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.84	Slope	0.96	Depth to hard bedrock	0.84
Splitro	30	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Slope	0.96	Slope	0.96	Slope	1.00
214:							
Winevada	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	0.79	Depth to hard bedrock	1.00	Depth to hard bedrock	0.79
Splitro	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
215:							
Winkleman	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Shrink-swell	0.50	Depth to saturated zone	0.90	Shrink-swell	0.50
				Shrink-swell	0.50		
216:							
Yamo	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.04	Slope	0.04	Slope	1.00

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
217:							
Yamo	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
218:							
Yellowwash	50	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Slope	0.16	Slope	0.16	Slope	1.00
Piezon	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.16	Depth to soft bedrock	0.46	Slope	1.00
				Slope	0.16		
219:							
Youga	90	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
		Slope	0.04	Slope	0.04	Shrink-swell	0.50
220:							
Youga	50	Not limited		Not limited		Very limited	
						Slope	1.00
Dinnen	40	Not limited		Not limited		Very limited	
						Slope	1.00
221:							
Youga	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Gelkie	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Clayburn, warm	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
222:							
Youngston, cool	90	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
				Depth to saturated zone	0.15		
223:							
Youngston, well drained	90	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
224:							
Zillion	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.35	Content of large stones	0.35	Content of large stones	0.35
Barkelew, moist	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.54	Content of large stones	0.54	Content of large stones	0.54

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
224:							
Grapit	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
225:							
Abracon	45	Not limited		Not limited		Somewhat limited	
						Slope	0.50
Solirec	40	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	0.50
						Shrink-swell	0.50
226:							
Arches	45	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
Mespun	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Rock outcrop	20	Not rated		Not rated		Not rated	
227:							
Bankard family	55	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
Cameo	35	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
228:							
Bondman	50	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
Rock outcrop	35	Not rated		Not rated		Not rated	
229:							
Cameo	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
230:							
Cragnot	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.19	Content of large stones	0.19	Content of large stones	0.19
Pensore	35	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.96	Content of large stones	0.96	Content of large stones	0.96
Grapit	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.33	Content of large stones	0.33	Content of large stones	0.33

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
231:							
Green River	70	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
				Depth to saturated zone	0.95		
Fluvaquents	15	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
232:							
Lakebench	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Strell	35	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
233:							
Lakebench	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Yampa	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
234:							
Mantlemine	85	Not limited		Not limited		Somewhat limited	
						Slope	0.12
235:							
Mantlemine	55	Not limited		Not limited		Somewhat limited	
						Slope	0.88
Emlin	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	0.88
						Shrink-swell	0.50
236:							
Mido	85	Not limited		Not limited		Very limited	
						Slope	1.00
237:							
Mikim loam	55	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
Mikim silt loam	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
238:							
Milok	85	Not limited		Not limited		Somewhat limited	
						Slope	0.50
239:							
Milok	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
239:							
Solirec	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Strych	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
240:							
Milok	70	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Strych	20	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
		Content of large stones	0.93	Content of large stones	0.93	Content of large stones	0.93
241:							
Pensore	60	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.96	Content of large stones	0.96	Content of large stones	0.96
Roto	25	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.97	Slope	1.00	Depth to hard bedrock	0.97
		Content of large stones	0.08	Content of large stones	0.08	Content of large stones	0.08
242:							
Riverwash	85	Not rated		Not rated		Not rated	
243:							
Rizno	35	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Slope	0.96	Slope	0.96	Slope	1.00
		Content of large stones	0.32	Content of large stones	0.32	Content of large stones	0.32
Windcomb	35	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Slope	0.96	Slope	0.96	Slope	1.00
Anasazi	15	Somewhat limited		Very limited		Very limited	
		Slope	0.96	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.90	Slope	0.96	Depth to hard bedrock	0.90
244:							
Rock outcrop	60	Not rated		Not rated		Not rated	

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
244:							
Hackling	30	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Depth to hard bedrock	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
245:							
Rock outcrop	30	Not rated		Not rated		Not rated	
Torriorthents	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Content of large stones	0.01	Content of large stones	0.01	Content of large stones	0.01
Ustorthents	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.20	Depth to hard bedrock	1.00	Content of large stones	0.20
		Depth to hard bedrock	0.20	Content of large stones	0.20	Depth to hard bedrock	0.20
246:							
Schoonover	55	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Slope	0.96	Slope	0.96	Slope	1.00
Duffymont	30	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
		Slope	0.96	Slope	0.96	Slope	1.00
247:							
Stout	60	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
Rock outcrop	30	Not rated		Not rated		Not rated	
248:							
Strych	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
Mellenthin	35	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
		Slope	1.00	Slope	1.00	Slope	1.00

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
249:							
Zillion	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.72	Content of large stones	0.72	Content of large stones	0.72
Yampa	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
Clyl	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.03	Content of large stones	0.03	Content of large stones	0.03
250:							
Abracon	85	Not limited		Not limited		Somewhat limited	
						Slope	0.50
251:							
Badland	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to soft bedrock	1.00	Shrink-swell	1.00	Depth to soft bedrock	1.00
		Shrink-swell	1.00	Depth to soft bedrock	1.00	Shrink-swell	1.00
Renegade	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
252:							
Bigtom	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
Namlot	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Content of large stones	0.97	Content of large stones	0.97	Content of large stones	0.97
Dokie	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
253:							
Clapper	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
254:							
Cliff	85	Not limited		Not limited		Not limited	

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
255:							
Clyl	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.70	Content of large stones	0.70	Content of large stones	0.70
Pinerid	40	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Depth to hard bedrock	1.00
256:							
Cortyzack	65	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
Diagulch	20	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.04	Slope	0.04	Slope	1.00
257:							
Cortyzack	55	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
Duffymont	30	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
		Slope	0.96	Slope	0.96	Slope	1.00
258:							
Cortyzack	45	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
Flynncove	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.93	Content of large stones	0.93	Content of large stones	0.93
259:							
Denco	45	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.03		
Gerst	40	Very limited		Very limited		Very limited	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
260:							
Dokie	70	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
260:							
Flynncove	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
261:							
Dokie	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
Namlot	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Content of large stones	0.97	Content of large stones	0.97	Content of large stones	0.97
262:							
Gompers	85	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
263:							
Hanksville	85	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
		Slope	0.96	Slope	0.96	Slope	1.00
				Depth to soft bedrock	0.20		
264:							
Mikim	85	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
		Slope	0.04	Slope	0.04	Shrink-swell	0.50
265:							
Mikim	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
266:							
Rock outcrop	40	Not rated		Not rated		Not rated	
Boxring	25	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00	Content of large stones	1.00
Tridell	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.87	Content of large stones	0.87	Content of large stones	0.87
267:							
Solirec	35	Not limited		Not limited		Somewhat limited	
						Slope	0.50

Table 11.--Building site development--Dwellings without basements, dwellings with basements and small commercial buildings--Continued

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
267:							
Abracon	30	Not limited		Not limited		Somewhat limited	
						Slope	0.50
Begay	20	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.04	Slope	0.04	Slope	1.00
268:							
Toliver	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
Rock outcrop	30	Not rated		Not rated		Not rated	
269:							
Walknolls	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
Badland	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to soft bedrock	1.00	Shrink-swell	1.00	Depth to soft bedrock	1.00
		Shrink-swell	1.00	Depth to soft bedrock	1.00	Shrink-swell	1.00
Rock outcrop	10	Not rated		Not rated		Not rated	
270:							
Walknolls	55	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
Gilston	35	Not limited		Not limited		Somewhat limited	
						Slope	0.12
271:							
Water	95	Not rated		Not rated		Not rated	

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1:							
Abor	85	Very limited		Very limited		Very limited	
		Low strength	1.00	Cutbanks cave	1.00	Slope	1.00
		Shrink-swell	1.00	Slope	1.00	Depth to bedrock	0.03
		Slope	1.00	Too clayey	0.88		
				Depth to soft bedrock	0.03		
2:							
Abor	80	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	1.00	Depth to bedrock	0.03
		Shrink-swell	1.00	Too clayey	0.88		
				Depth to soft bedrock	0.03		
3:							
Adderton	90	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Cutbanks cave	0.10		
		Flooding	0.40				
4:							
Almy	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Low strength	0.78	Cutbanks cave	0.10	Slope	0.04
		Slope	0.04	Slope	0.04		
5:							
Apmay	90	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Depth to saturated zone	1.00	Depth to saturated zone	0.03
		Flooding	0.40	Cutbanks cave	1.00		
		Depth to saturated zone	0.03				
6:							
Avalon	45	Not limited		Somewhat limited		Not limited	
				Cutbanks cave	0.10		
Mack	45	Not limited		Very limited		Not limited	
				Cutbanks cave	1.00		
7:							
Avalon	30	Not limited		Somewhat limited		Not limited	
				Cutbanks cave	0.10		
Persayo, moist	25	Very limited		Very limited		Very limited	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to bedrock	1.00
						Droughty	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	0.10	Content of large stones	0.20

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
7:							
Degater	20	Very limited		Very limited		Very limited	
		Low strength	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Too clayey	0.12	Too clayey	1.00
		Slope	1.00	Cutbanks cave	0.10	Depth to bedrock	0.01
				Depth to soft bedrock	0.01		
8:							
Badland	90	Not rated		Not rated		Very limited	
						Depth to bedrock	1.00
						Slope	1.00
						Droughty	1.00
						Salinity	1.00
						Too clayey	1.00
9:							
Baroid	55	Somewhat limited		Very limited		Somewhat limited	
		Flooding	0.40	Cutbanks cave	1.00	Droughty	0.64
						Salinity	0.13
Eghelm	35	Somewhat limited		Somewhat limited		Very limited	
		Flooding	0.40	Cutbanks cave	0.10	Sodium content	1.00
				Depth to saturated zone	0.03		
10:							
Battlement	85	Somewhat limited		Somewhat limited		Not limited	
		Flooding	0.40	Cutbanks cave	0.10		
11:							
Battlement, saline--	80	Somewhat limited		Somewhat limited		Not limited	
		Low strength	0.78	Depth to saturated zone	0.47		
		Flooding	0.40				
		Flooding	0.40	Cutbanks cave	0.10		
12:							
Berlake	85	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
13:							
Berlake	85	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00		
14:							
Berlake	55	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
Maysprings	30	Not limited		Very limited		Not limited	
				Cutbanks cave	1.00		
15:							
Berlake	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	0.10		
Taffom	30	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
				Slope	1.00		

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
15:							
Gretdivid	15	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
				Slope	1.00	Droughty	0.91
						Too sandy	0.50
16:							
Bilhil	85	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Depth to saturated zone	0.61		
		Shrink-swell	1.00	Cutbanks cave	0.10		
				Too clayey	0.03		
17:							
Binco	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	1.00	Content of large stones	1.00
		Shrink-swell	1.00	Too clayey	0.50		
		Frost action	0.50				
18:							
Boltus	50	Very limited		Very limited		Very limited	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to bedrock	1.00
		Low strength	1.00	Cutbanks cave	0.10	Droughty	0.73
		Shrink-swell	1.00				
Beamton	25	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Depth to soft bedrock	0.20	Depth to bedrock	0.20
		Shrink-swell	0.50	Cutbanks cave	0.10		
19:							
Borollic Natrargids	40	Very limited		Somewhat limited		Very limited	
		Low strength	1.00	Cutbanks cave	0.10	Sodium content	1.00
		Shrink-swell	0.50				
Borollic Haplargids	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63	Slope	0.63
		Shrink-swell	0.50	Cutbanks cave	0.10		
Ustic Torrifluvents	25	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
		Flooding	0.40	Depth to saturated zone	0.35		
20:							
Brownsto	50	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.96	Slope	0.96	Slope	0.96
				Cutbanks cave	0.10	Gravel content	0.18
						Droughty	0.02
Castee	30	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.96	Cutbanks cave	1.00	Slope	0.96
				Slope	0.96		

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
21:							
Bulkley	80	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	1.00	Content of large stones	0.95
		Shrink-swell	1.00	Too clayey	0.50		
22:							
Bulkley	80	Very limited		Very limited		Very limited	
		Low strength	1.00	Cutbanks cave	1.00	Too clayey	1.00
		Shrink-swell	1.00	Too clayey	0.88		
23:							
Bulkley	90	Very limited		Very limited		Very limited	
		Low strength	1.00	Cutbanks cave	1.00	Slope	1.00
		Shrink-swell	1.00	Slope	1.00	Too clayey	1.00
		Slope	1.00	Too clayey	0.88		
24:							
Bulkley	60	Very limited		Very limited		Very limited	
		Low strength	1.00	Cutbanks cave	1.00	Slope	1.00
		Shrink-swell	1.00	Slope	1.00	Content of large stones	0.92
		Slope	1.00	Too clayey	0.88	Gravel content	0.92
Quilt	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Too clayey	0.12	Gravel content	0.22
				Cutbanks cave	0.10	Content of large stones	0.01
25:							
Campspass	90	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Frost action	0.50				
26:							
Campspass	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Frost action	0.50				
27:							
Canlodore	95	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.45	Cutbanks cave	1.00	Droughty	1.00
				Content of large stones	0.45		
28:							
Carbol	40	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
				Cutbanks cave	0.10	Droughty	1.00

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
28:							
Irigul	25	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
						Droughty	1.00
		Slope	0.96	Slope	0.96	Slope	0.96
				Cutbanks cave	0.10	Content of large stones	0.54
						Gravel content	0.04
Rock outcrop	25	Not rated		Not rated		Not rated	
29:							
Carbol	45	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
						Droughty	1.00
				Cutbanks cave	0.10		
Miracle	30	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Depth to hard bedrock	1.00	Depth to bedrock	0.03
		Depth to hard bedrock	0.03				
				Cutbanks cave	0.10		
		bedrock					
30:							
Carmody	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.37	Depth to soft bedrock	0.95	Depth to bedrock	0.95
						Droughty	0.49
				Slope	0.37	Slope	0.37
				Cutbanks cave	0.10		
Rock River	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.37	Slope	0.37	Slope	0.37
				Cutbanks cave	0.10		
Crestman	20	Somewhat limited		Very limited		Very limited	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to bedrock	1.00
						Droughty	1.00
		Slope	0.37	Slope	0.37	Slope	0.37
				Cutbanks cave	0.10		
31:							
Castee	90	Not limited		Very limited		Not limited	
				Cutbanks cave	1.00		
32:							
Chroder	80	Not limited		Somewhat limited		Not limited	
				Cutbanks cave	0.10		
33:							
Clayburn, warm	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.96	Slope	0.96	Slope	0.96
		Low strength	0.78	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Frost action	0.50				
34:							
Clayburn	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10	Content of large stones	0.01

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
34:							
Foidel	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10		
35:							
Clayburn	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	0.78	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Frost action	0.50				
Youga, moist	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Frost action	0.50				
36:							
Clifsand	60	Somewhat limited		Very limited		Somewhat limited	
		Content of large stones	0.27	Cutbanks cave	1.00	Droughty	0.20
				Content of large stones	0.27	Content of large stones	0.01
Chroder	30	Not limited		Somewhat limited		Not limited	
				Cutbanks cave	0.10		
37:							
Cochetopa	85	Very limited		Very limited		Very limited	
		Low strength	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Cutbanks cave	0.10		
		Slope	1.00				
38:							
Cochetopa	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	1.00				
39:							
Cochetopa, warm	85	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	1.00				
40:							
Cochetopa	45	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Slope	0.84	Slope	0.84
		Shrink-swell	1.00	Cutbanks cave	0.10		
		Slope	0.84				
Gothic	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Cutbanks cave	1.00	Content of large stones	1.00
		Low strength	1.00	Too clayey	0.12		
		Content of large stones	0.01	Content of large stones	0.01		

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
41:							
Cochetopa	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Too clayey	0.12	Content of large stones	1.00
		Shrink-swell	1.00	Cutbanks cave	0.10		
Gothic	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Cutbanks cave	1.00	Content of large stones	0.54
		Low strength	1.00	Too clayey	0.12		
42:							
Cochetopa	50	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Cutbanks cave	0.10	Slope	0.04
		Shrink-swell	1.00	Slope	0.04		
		Slope	0.04				
Jerry	35	Very limited		Somewhat limited		Very limited	
		Low strength	1.00	Too clayey	0.12	Content of large stones	1.00
		Shrink-swell	1.00	Cutbanks cave	0.10		
		Slope	0.04	Slope	0.04	Slope	0.04
43:							
Coldspring, moist	80	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
				Depth to hard bedrock	0.71		
44:							
Cowestglen	80	Somewhat limited		Very limited		Not limited	
		Flooding	0.40	Cutbanks cave	1.00		
45:							
Coyet	90	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.07
46:							
Coyet	85	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
				Slope	1.00	Droughty	0.07
47:							
Coyet	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	1.00	Droughty	0.14
Crestman, moist	35	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to soft bedrock	1.00	Depth to bedrock	1.00
		Depth to soft bedrock	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	0.10	Droughty	1.00
48:							
Crago	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	1.00	Carbonate content	1.00
						Content of large stones	1.00
						Droughty	0.66
						Gravel content	0.01

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
48:							
Pensore	35	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
						Droughty	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	0.10	Carbonate content	1.00
						Gravel content	0.22
Grapit	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.01	Cutbanks cave	0.10	Carbonate content	1.00
				Content of large stones	0.01	Content of large stones	0.20
						Gravel content	0.09
49:							
Cryoborolls, slumped	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Cutbanks cave	0.10	Content of large stones	0.08
		Frost action	0.50	Too clayey	0.02		
		Low strength	0.22				
50:							
Cushool	85	Not limited		Somewhat limited		Somewhat limited	
				Depth to soft bedrock	0.84	Depth to bedrock	0.84
						Droughty	0.02
				Cutbanks cave	0.10		
51:							
Cushool	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.84	Depth to bedrock	0.84
						Droughty	0.02
				Cutbanks cave	0.10		
52:							
Danavore	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Content of large stones	1.00
		Frost action	0.50	Depth to soft bedrock	0.97	Droughty	1.00
		Content of large stones	0.34	Content of large stones	0.34	Slope	1.00
						Depth to bedrock	0.97
				Cutbanks cave	0.10		
Waybe	30	Very limited		Very limited		Very limited	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to bedrock	1.00
		Shrink-swell	1.00	Slope	1.00	Slope	1.00
		Slope	1.00	Cutbanks cave	0.10	Droughty	0.99
		Low strength	1.00			Content of large stones	0.03
		Frost action	0.50			Gravel content	0.02
53:							
Davtone	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10		
		Low strength	0.22				

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
53:							
Forsey	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Content of large stones	1.00
		Content of large stones	1.00	Content of large stones	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10	Droughty	0.62
54:							
Deaver	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Depth to soft bedrock	0.46	Depth to bedrock	0.46
		Shrink-swell	1.00	Too clayey	0.12	Content of large stones	0.03
				Cutbanks cave	0.10	Gravel content	0.02
Avalon	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.04	Cutbanks cave	0.10	Slope	0.04
				Slope	0.04		
55:							
Deaver	60	Very limited		Very limited		Very limited	
		Low strength	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Too clayey	0.12	Depth to bedrock	0.10
		Slope	1.00	Cutbanks cave	0.10		
				Depth to soft bedrock	0.10		
Chipeta	30	Very limited		Very limited		Very limited	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to bedrock	1.00
		Low strength	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Cutbanks cave	0.10	Droughty	0.71
		Slope	1.00				
56:							
Debone	90	Somewhat limited		Somewhat limited		Very limited	
		Low strength	0.78	Cutbanks cave	0.10	Sodium content	1.00
		Shrink-swell	0.50			Droughty	0.01
57:							
Detra	50	Somewhat limited		Somewhat limited		Not limited	
		Shrink-swell	0.50	Cutbanks cave	0.10		
		Frost action	0.50				
Cortyzack	40	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Cutbanks cave	0.10		
58:							
Diaflats	45	Somewhat limited		Very limited		Somewhat limited	
		Depth to hard bedrock	0.79	Depth to hard bedrock	1.00	Depth to bedrock	0.80
		Slope	0.04	Cutbanks cave	0.10	Slope	0.04
				Slope	0.04		

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
58:							
Fondillas	35	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
						Droughty	1.00
		Content of large stones	0.25	Content of large stones	0.25	Slope	0.04
		Slope	0.04	Cutbanks cave	0.10		
				Slope	0.04		
59:							
Dranyon	90	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Cutbanks cave	1.00	Slope	0.63
		Frost action	0.50	Slope	0.63		
60:							
Dumps, mine	100	Not rated		Not rated		Not rated	
61:							
Ecklund	50	Somewhat limited		Very limited		Somewhat limited	
		Depth to hard bedrock	0.06	Depth to hard bedrock	1.00	Droughty	0.70
						Depth to bedrock	0.06
				Cutbanks cave	1.00		
Tipperary	40	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.29
62:							
Eghelm	90	Somewhat limited		Very limited		Somewhat limited	
		Flooding	0.40	Cutbanks cave	1.00	Droughty	0.01
63:							
Eghelm, moist	90	Somewhat limited		Very limited		Somewhat limited	
		Flooding	0.40	Cutbanks cave	1.00	Droughty	0.02
				Depth to saturated zone	0.03		
64:							
Emlin	85	Not limited		Somewhat limited		Not limited	
				Cutbanks cave	0.10		
65:							
Emlin	65	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				
Tymosling	20	Very limited		Somewhat limited		Very limited	
		Low strength	1.00	Too clayey	0.28	Gravel content	1.00
		Shrink-swell	1.00	Slope	0.16	Slope	0.16
		Slope	0.16	Cutbanks cave	0.10	Content of large stones	0.11
				Depth to soft bedrock	0.10	Depth to bedrock	0.10
66:							
Evanot	90	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
67:							
Evanot	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	0.10		

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
68:							
Evanot	50	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63	Slope	0.63
				Cutbanks cave	0.10		
Yamo	25	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63	Slope	0.63
		Frost action	0.50	Cutbanks cave	0.10		
69:							
Fenster	45	Somewhat limited		Somewhat limited		Not limited	
		Low strength	0.22	Cutbanks cave	0.10		
Thenipel	30	Not limited		Somewhat limited		Not limited	
				Cutbanks cave	0.10		
70:							
Fluvaquents, frequently flooded	50	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Frost action	1.00	Cutbanks cave	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Flooding	0.80	Content of large stones	0.03
Haplaquolls, frequently flooded	45	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Frost action	1.00	Cutbanks cave	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Flooding	0.80		
		Shrink-swell	0.50				
71:							
Flygare, dry	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Content of large stones	0.11		
		Content of large stones	0.11	Cutbanks cave	0.10		
72:							
Foidel, cool	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.96	Slope	0.96	Slope	0.96
		Frost action	0.50	Cutbanks cave	0.10		
73:							
Foidel	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10		
74:							
Foidel, moist	35	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Slope	0.96	Slope	0.96
		Slope	0.96	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Frost action	0.50				

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
74:							
Flygare	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.96	Slope	0.96	Slope	0.96
		Frost action	0.50	Content of large stones	0.11		
		Content of large stones	0.11	Cutbanks cave	0.10		
Skyway, moist	20	Very limited		Very limited		Somewhat limited	
		Frost action	1.00	Depth to hard bedrock	1.00	Slope	0.96
		Slope	0.96	Cutbanks cave	1.00	Depth to bedrock	0.35
		Depth to hard bedrock	0.35	Slope	0.96	Droughty	0.01
						Content of large stones	0.01
75:							
Fonce	90	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.24
76:							
Fonce	90	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.11
						Gravel content	0.03
						Content of large stones	0.01
77:							
Forelle	85	Not limited		Somewhat limited		Somewhat limited	
				Cutbanks cave	0.10	Content of large stones	0.03
78:							
Forelle	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	0.10	Content of large stones	0.03
79:							
Forelle	50	Not limited		Somewhat limited		Somewhat limited	
				Cutbanks cave	0.10	Content of large stones	0.03
Evanot	40	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
80:							
Forelle	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	0.10	Content of large stones	0.03
Evanot	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	0.10		
81:							
Forelle	40	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Cutbanks cave	0.10	Content of large stones	0.03
		Low strength	0.22				

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
81:							
Obadia	35	Very limited		Somewhat limited		Very limited	
		Low strength	1.00	Cutbanks cave	0.10	Sodium content	1.00
		Shrink-swell	1.00				
82:							
Forelle	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.84	Slope	0.84	Slope	0.84
				Cutbanks cave	0.10	Content of large stones	0.03
Pinelli	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.84	Slope	0.84	Slope	0.84
		Low strength	0.78	Cutbanks cave	0.10		
		Shrink-swell	0.50				
Maysprings	15	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.84	Cutbanks cave	1.00	Slope	0.84
				Slope	0.84	Too sandy	0.50
						Droughty	0.17
83:							
Forsey	50	Very limited		Very limited		Very limited	
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
		Slope	0.96	Slope	0.96	Slope	0.96
		Frost action	0.50	Cutbanks cave	0.10	Droughty	0.62
Libeg	30	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Cutbanks cave	1.00	Slope	0.04
		Slope	0.04	Slope	0.04		
		Content of large stones	0.01	Content of large stones	0.01		
84:							
Gebson, moist	55	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Content of large stones	1.00
		Frost action	0.50	Slope	1.00	Slope	1.00
Youga	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Frost action	0.50	Slope	0.16	Slope	0.16
		Slope	0.16	Cutbanks cave	0.10		
85:							
Giarch	90	Somewhat limited		Very limited		Very limited	
		Low strength	0.78	Cutbanks cave	1.00	Sodium content	1.00
		Shrink-swell	0.50	Depth to saturated zone	0.15		
		Flooding	0.40				
86:							
Gracot	50	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
				Slope	1.00	Gravel content	1.00
						Droughty	0.95
						Content of large stones	0.54

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
86:							
Maybell	30	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
				Slope	1.00	Too sandy	0.50
						Droughty	0.23
87:							
Gretdivid	35	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
				Slope	1.00	Droughty	0.91
						Too sandy	0.50
Taffom	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	0.10		
Abor	15	Very limited		Very limited		Very limited	
		Low strength	1.00	Cutbanks cave	1.00	Slope	1.00
		Shrink-swell	1.00	Slope	1.00	Too clayey	1.00
		Slope	1.00	Too clayey	0.88	Depth to bedrock	0.46
				Depth to soft bedrock	0.46		
88:							
Grieves	85	Not limited		Somewhat limited		Not limited	
				Cutbanks cave	0.10		
89:							
Grieves	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	0.10		
90:							
Grieves	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	0.10		
Crestman	35	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to soft bedrock	1.00	Depth to bedrock	1.00
		Depth to soft bedrock	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	0.10	Droughty	1.00
91:							
Grieves	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	0.10		
Yamo	25	Somewhat limited		Somewhat limited		Somewhat limited	
		Frost action	0.50	Cutbanks cave	0.10	Slope	0.04
		Slope	0.04	Slope	0.04		
Crestman	20	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to soft bedrock	1.00	Depth to bedrock	1.00
		Depth to soft bedrock	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	0.10	Droughty	1.00

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
92:							
Grimm	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.89	Cutbanks cave	1.00	Content of large stones	1.00
				Content of large stones	0.89	Droughty	1.00
						Gravel content	0.37
Ustic Torriorthents, shallow	40	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to soft bedrock	1.00	Depth to bedrock	1.00
		Depth to soft bedrock	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10	Content of large stones	1.00
						Droughty	1.00
						Gravel content	0.01
93:							
Gullied land	85	Not rated		Not rated		Not rated	
94:							
Hapney, moist	90	Very limited		Somewhat limited		Very limited	
		Low strength	1.00	Depth to saturated zone	0.15	Sodium content	1.00
		Shrink-swell	0.50				
		Frost action	0.50	Cutbanks cave	0.10		
95:							
Haterton	60	Somewhat limited		Very limited		Very limited	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to bedrock	1.00
						Droughty	0.98
				Cutbanks cave	0.10		
Piezon	30	Not limited		Somewhat limited		Somewhat limited	
				Depth to soft bedrock	0.95	Depth to bedrock	0.95
				Cutbanks cave	0.10		
96:							
Heathcoat	85	Very limited		Somewhat limited		Very limited	
		Low strength	1.00	Cutbanks cave	0.10	Content of large stones	1.00
		Shrink-swell	0.50				
97:							
Heathcoat	60	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Slope	0.84	Slope	0.84
		Slope	0.84	Cutbanks cave	0.10		
		Shrink-swell	0.50				
Clayburn	25	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
		Low strength	0.78	Slope	1.00		
		Shrink-swell	0.50				
		Frost action	0.50				
98:							
Herm	50	Very limited		Very limited		Very limited	
		Low strength	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Too clayey	0.12	Content of large stones	0.99
		Slope	1.00	Cutbanks cave	0.10		

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
98:							
Fughes	35	Very limited		Very limited		Very limited	
		Low strength	1.00	Slope	1.00	Content of large stones	1.00
		Shrink-swell	1.00	Too clayey	0.50		
		Slope	1.00	Cutbanks cave	0.10	Slope	1.00
		Content of large stones	0.01	Content of large stones	0.01		
99:							
Hesperus, dry	85	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Cutbanks cave	0.10	Slope	0.04
		Shrink-swell	0.50	Slope	0.04		
		Frost action	0.50				
		Slope	0.04				
100:							
Hesperus	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Frost action	0.50				
101:							
Hesperus	90	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Slope	0.96	Slope	0.96
		Slope	0.96	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Frost action	0.50				
102:							
Holter	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Content of large stones	1.00
		Content of large stones	0.86	Content of large stones	0.86	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10	Droughty	0.26
Detra	30	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Frost action	0.50				
103:							
Iles	85	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	1.00				
		Frost action	0.50				
104:							
Ironco	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
		Frost action	0.50	Cutbanks cave	0.10	Droughty	0.42
Mulgon, dry	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00	Droughty	0.56
		Frost action	0.50	Cutbanks cave	0.10		

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
105:							
Ironsprings---	85	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.02
106:							
Ironsprings---	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	1.00	Droughty	0.02
107:							
Ironsprings---	40	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
				Slope	1.00	Too sandy	0.50
						Droughty	0.06
Maysprings---	25	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
				Slope	1.00	Too sandy	0.50
Gretdivid---	15	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
				Slope	1.00	Droughty	0.91
						Too sandy	0.50
108:							
Jerry---	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				
Cochetopa---	35	Very limited		Very limited		Very limited	
		Low strength	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Cutbanks cave	0.10		
		Slope	1.00				
109:							
Joebas---	60	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
						Droughty	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	0.10	Content of large stones	0.08
						Gravel content	0.01
Rock outcrop---	30	Not rated		Not rated		Not rated	
110:							
Kemmerer---	80	Very limited		Very limited		Very limited	
		Low strength	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Depth to soft bedrock	0.97	Depth to bedrock	0.97
		Slope	1.00			Droughty	0.06
				Too clayey	0.12		
				Cutbanks cave	0.10		

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
111:							
Kemmerer	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Depth to soft bedrock	0.74	Gravel content	1.00
		Shrink-swell	1.00	Too clayey	0.12	Depth to bedrock	0.74
				Cutbanks cave	0.10	Content of large stones	0.20
						Droughty	0.05
Grapit	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.06	Cutbanks cave	1.00	Content of large stones	1.00
				Content of large stones	0.06	Carbonate content	1.00
						Gravel content	0.04
						Droughty	0.02
112:							
Kemmerer	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Depth to soft bedrock	0.97	Depth to bedrock	0.97
		Shrink-swell	1.00	Too clayey	0.12	Droughty	0.06
				Cutbanks cave	0.10		
Moyerson	40	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to soft bedrock	1.00	Depth to bedrock	1.00
		Depth to soft bedrock	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	0.10	Droughty	0.96
		Shrink-swell	1.00				
113:							
Kemmerer	60	Very limited		Very limited		Very limited	
		Low strength	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Depth to soft bedrock	0.97	Depth to bedrock	0.97
		Slope	1.00	Too clayey	0.12	Droughty	0.06
				Cutbanks cave	0.10		
Yamo	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10		
114:							
Lamphier	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.96	Slope	0.96	Slope	0.96
		Frost action	0.50	Cutbanks cave	0.10		
115:							
Lamphier	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10		
116:							
Lamphier	45	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.96	Slope	0.96	Slope	0.96
		Frost action	0.50	Cutbanks cave	0.10		

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
116:							
Jerry	30	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Slope	0.96	Slope	0.96
		Shrink-swell	1.00	Cutbanks cave	0.10		
		Slope	0.96				
117:							
Lamphier	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10		
Jerry	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	1.00				
118:							
Lander	85	Somewhat limited		Very limited		Not limited	
		Shrink-swell	0.50	Cutbanks cave	1.00		
		Frost action	0.50	Depth to saturated zone	0.95		
		Flooding	0.40				
119:							
Langspring	85	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Cutbanks cave	0.10		
120:							
Layoint	35	Somewhat limited		Very limited		Somewhat limited	
		Depth to hard bedrock	0.29	Depth to hard bedrock	1.00	Depth to bedrock	0.29
				Cutbanks cave	1.00	Droughty	0.11
Moosed	25	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
						Droughty	1.00
		Slope	0.37	Slope	0.37	Slope	0.37
				Cutbanks cave	0.10		
Berlake	20	Not limited		Somewhat limited		Not limited	
				Cutbanks cave	0.10		
121:							
Leaps	90	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Too clayey	0.12	Slope	0.04
		Shrink-swell	1.00	Cutbanks cave	0.10		
		Slope	0.04	Slope	0.04		
122:							
Leswill	50	Very limited		Somewhat limited		Very limited	
		Low strength	1.00	Cutbanks cave	0.10	Sodium content	1.00
Rogrube	30	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
123:							
Lilsnake	45	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
						Slope	0.63
		Slope	0.63	Slope	0.63	Droughty	0.60
				Cutbanks cave	0.10		

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
123:							
Sandwash	30	Somewhat limited		Very limited		Very limited	
		Content of large stones	0.75	Depth to hard bedrock	1.00	Carbonate content	1.00
		Depth to hard bedrock	0.10	Content of large stones	0.75	Depth to bedrock	0.10
				Cutbanks cave	0.10	Droughty	0.06
124:							
Losee	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.84	Content of large stones	0.84	Content of large stones	1.00
		Frost action	0.50	Cutbanks cave	0.10	Droughty	0.26
Thornburgh, dry	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
				Cutbanks cave	0.10	Droughty	0.60
125:							
Massadona	85	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	1.00	Too clayey	0.03		
126:							
Massadona	65	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	1.00				
Youngston, moist	20	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Flooding	0.40				
127:							
Maudlin	50	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Depth to hard bedrock	1.00	Depth to bedrock	0.46
		Depth to hard bedrock	0.46	Cutbanks cave	1.00	Slope	0.04
		Slope	0.04	Slope	0.04		
Duffymont	30	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
		Frost action	0.50	Cutbanks cave	0.10	Droughty	1.00
		Slope	0.04	Slope	0.04	Slope	0.04
128:							
Maybell	90	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Too sandy	0.50
						Droughty	0.19

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
129:							
Maybell	90	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
				Slope	1.00	Too sandy	0.50
						Droughty	0.23
130:							
Maysprings	85	Not limited		Very limited		Not limited	
				Cutbanks cave	1.00		
131:							
Maysprings	50	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
				Slope	1.00	Too sandy	0.50
Gretdivid	30	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
				Slope	1.00	Droughty	0.91
						Too sandy	0.50
132:							
Milren	80	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	1.00				
133:							
Miracle	50	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Depth to hard bedrock	1.00	Depth to bedrock	0.03
		Depth to hard bedrock	0.03	Cutbanks cave	0.10		
Coldspring	30	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
				Depth to hard bedrock	0.71		
134:							
Morapos	85	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	1.00				
135:							
Morapos	85	Very limited		Very limited		Very limited	
		Low strength	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Cutbanks cave	0.10		
		Slope	1.00				
136:							
Morapos	40	Very limited		Somewhat limited		Not limited	
		Shrink-swell	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
Pagoda	40	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	1.00	Too clayey	0.03		
137:							
Morset	50	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Cutbanks cave	0.10		

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
137:							
Youga	30	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Cutbanks cave	0.10		
138:							
Moyerson	50	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to soft bedrock	1.00	Depth to bedrock	1.00
		Depth to soft bedrock	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	0.10	Droughty	0.96
		Shrink-swell	1.00				
Rentsac	30	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10	Droughty	1.00
		Content of large stones	0.08	Content of large stones	0.08	Content of large stones	0.54
						Gravel content	0.04
139:							
Muggins	85	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Slope	0.63	Slope	0.63
		Shrink-swell	1.00	Too clayey	0.12		
		Slope	0.63	Cutbanks cave	0.10		
		Frost action	0.50				
140:							
Ninot	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	1.00	Gravel content	1.00
						Content of large stones	0.01
Crago	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	1.00	Carbonate content	1.00
						Content of large stones	1.00
						Droughty	0.63
						Gravel content	0.01
Garlips	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Cutbanks cave	0.10		
		Frost action	0.50				
141:							
Nortez, cool	50	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Depth to hard bedrock	1.00	Depth to bedrock	0.46
		Shrink-swell	1.00	Cutbanks cave	0.10		
		Depth to hard bedrock	0.46				
Morapos	40	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	1.00				

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
142:							
Nortez, cool--------	50	Very limited		Very limited		Very limited	
		Low strength	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Shrink-swell	1.00			Depth to bedrock	0.46
		Slope	1.00	Slope	1.00		
		Depth to hard bedrock	0.46	Cutbanks cave	0.10		
Morapos----------	40	Very limited		Very limited		Very limited	
		Low strength	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	1.00	Cutbanks cave	0.10		
		Slope	1.00				
143:							
Nunemaker----------	90	Very limited		Very limited		Very limited	
		Low strength	1.00	Cutbanks cave	1.00	Sodium content	1.00
		Shrink-swell	1.00	Too clayey	0.50		
144:							
Pagoda----------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50	Too clayey	0.03		
145:							
Pagoda----------	85	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50	Too clayey	0.03		
146:							
Pavillion----------	60	Somewhat limited		Somewhat limited		Somewhat limited	
		Low strength	0.78	Slope	0.63	Slope	0.63
		Slope	0.63	Cutbanks cave	0.10	Depth to bedrock	0.06
		Shrink-swell	0.50	Depth to soft bedrock	0.06		
Degater----------	25	Very limited		Somewhat limited		Very limited	
		Low strength	1.00	Slope	0.63	Gravel content	1.00
		Shrink-swell	1.00	Depth to soft bedrock	0.46	Too clayey	1.00
		Slope	0.63			Slope	0.63
				Too clayey	0.12	Depth to bedrock	0.46
				Cutbanks cave	0.10	Content of large stones	0.01
147:							
Peeler----------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
		Shrink-swell	0.50	Slope	1.00		
		Frost action	0.50				
148:							
Pilotpeak----------	45	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
						Droughty	1.00
				Cutbanks cave	0.10	Gravel content	0.50
Grubrob----------	35	Somewhat limited		Very limited		Somewhat limited	
		Depth to hard bedrock	0.64	Depth to hard bedrock	1.00	Depth to bedrock	0.65
						Droughty	0.10
				Cutbanks cave	1.00		

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
149:							
Pinelli	85	Somewhat limited		Somewhat limited		Not limited	
		Low strength	0.78	Cutbanks cave	0.10		
		Shrink-swell	0.50				
150:							
Pinelli	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Low strength	0.78	Cutbanks cave	0.10	Slope	0.04
		Shrink-swell	0.50	Slope	0.04		
		Slope	0.04				
151:							
Pinelli, dry	85	Somewhat limited		Somewhat limited		Not limited	
		Low strength	0.78	Cutbanks cave	0.10		
		Shrink-swell	0.50				
152:							
Pinridge	85	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Cutbanks cave	0.10		
		Flooding	0.40				
153:							
Pricecreek	85	Very limited		Somewhat limited		Not limited	
		Shrink-swell	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
154:							
Quealman	90	Very limited		Very limited		Somewhat limited	
		Flooding	1.00	Cutbanks cave	1.00	Flooding	0.60
				Flooding	0.60	Too sandy	0.50
155:							
Rencot	50	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
		Slope	0.84	Slope	0.84	Droughty	1.00
		Frost action	0.50	Cutbanks cave	0.10	Slope	0.84
						Gravel content	0.01
Duffymont	30	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
		Slope	0.84	Slope	0.84	Droughty	1.00
		Frost action	0.50	Cutbanks cave	0.10	Slope	0.84
156:							
Rentsac	85	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10	Droughty	1.00
		Content of large stones	0.03	Content of large stones	0.03	Content of large stones	0.54
						Gravel content	0.04

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
157:							
Rentsac	40	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Content of large stones	0.12	Droughty	1.00
		Content of large stones	0.12	Cutbanks cave	0.10	Gravel content	0.95
						Content of large stones	0.84
Moyerson	35	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to soft bedrock	1.00	Depth to bedrock	1.00
		Depth to soft bedrock	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	0.10	Droughty	0.97
		Shrink-swell	1.00			Content of large stones	0.32
						Gravel content	0.07
158:							
Rock outcrop	70	Not rated		Not rated		Not rated	
Earsman	20	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
		Slope	1.00	Slope	1.00	Droughty	1.00
				Cutbanks cave	0.10	Slope	1.00
159:							
Rock outcrop	50	Not rated		Not rated		Not rated	
Haploborolls	35	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.90	Slope	1.00	Depth to bedrock	0.90
		Frost action	0.50	Cutbanks cave	0.10	Droughty	0.77
						Gravel content	0.16
						Content of large stones	0.03
160:							
Rock outcrop	70	Not rated		Not rated		Not rated	
Torriorthents	25	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.79	Content of large stones	0.79	Droughty	1.00
		Frost action	0.50	Cutbanks cave	0.10	Content of large stones	0.84
						Gravel content	0.01
161:							
Rock River	85	Not limited		Somewhat limited		Not limited	
				Cutbanks cave	0.10		
162:							
Rock River	85	Not limited		Somewhat limited		Not limited	
				Cutbanks cave	0.10		

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
163:							
Rock River	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	0.10		
164:							
Rock River	50	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63	Slope	0.63
				Cutbanks cave	0.10		
Taffom	25	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Cutbanks cave	1.00	Slope	0.63
				Slope	0.63		
165:							
Rogrube sandy loam	50	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
Rogrube clay loam	25	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
166:							
Routt	80	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.96	Slope	0.96	Slope	0.96
		Frost action	0.50	Cutbanks cave	0.10		
167:							
Routt	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10		
Cochetopa	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	0.22	Too clayey	0.12		
				Cutbanks cave	0.10		
Binco	20	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Cutbanks cave	1.00	Content of large stones	1.00
		Low strength	1.00	Slope	1.00		
		Slope	1.00			Slope	1.00
		Frost action	0.50				
168:							
Ruedloff	85	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.29
169:							
Ruedloff	60	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
				Slope	1.00	Too sandy	0.50
						Droughty	0.21

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
169:							
Dunul	30	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Droughty	1.00
				Slope	1.00	Slope	1.00
						Gravel content	0.55
						Too sandy	0.50
						Content of large stones	0.32
170:							
Ryan Park	85	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.04	Cutbanks cave	1.00	Slope	0.04
				Slope	0.04		
171:							
Ryan Park	85	Not limited		Very limited		Not limited	
				Cutbanks cave	1.00		
172:							
Ryan Park	50	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
				Slope	1.00		
Coyet	30	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
				Slope	1.00	Droughty	0.07
173:							
Ryark	65	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.04	Cutbanks cave	1.00	Droughty	0.20
				Slope	0.04	Slope	0.04
Powderwash	20	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Cutbanks cave	0.10	Slope	0.04
		Shrink-swell	1.00	Slope	0.04	Depth to bedrock	0.01
		Slope	0.04	Too clayey	0.03		
				Depth to soft bedrock	0.01		
174:							
Ryark	70	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.20
Maybell	15	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Too sandy	0.50
						Droughty	0.19
175:							
Sandwash	40	Somewhat limited		Very limited		Very limited	
		Depth to hard bedrock	0.97	Depth to hard bedrock	1.00	Carbonate content	1.00
				Cutbanks cave	0.10	Depth to bedrock	0.97
						Droughty	0.64
Langspring	30	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Cutbanks cave	0.10		

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
175:							
Baston	20	Very limited		Somewhat limited		Very limited	
		Low strength	1.00	Depth to soft bedrock	0.64	Sodium content	1.00
		Shrink-swell	1.00			Depth to bedrock	0.65
		Frost action	0.50	Cutbanks cave	0.10	Droughty	0.20
				Too clayey	0.03		
176:							
Schooner	50	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Droughty	1.00
				Cutbanks cave	0.10	Slope	1.00
Rock outcrop	35	Not rated		Not rated		Not rated	
177:							
Schooner	55	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Droughty	1.00
				Cutbanks cave	0.10	Slope	1.00
Tricera	25	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.16	Cutbanks cave	1.00	Slope	0.16
				Slope	0.16	Droughty	0.13
178:							
Simanni	50	Not limited		Very limited		Not limited	
				Cutbanks cave	1.00		
Ruedloff	40	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Too sandy	0.50
						Droughty	0.21
179:							
Skyway, dry	85	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Frost action	1.00			Depth to bedrock	0.35
		Depth to hard bedrock	0.35	Slope	1.00	Droughty	0.01
				Cutbanks cave	1.00	Content of large stones	0.01
180:							
Spool	55	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Droughty	1.00
				Cutbanks cave	0.10	Slope	1.00
						Content of large stones	0.01
Maybell	30	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.16	Cutbanks cave	1.00	Slope	0.16
				Slope	0.16	Droughty	0.13
181:							
Stunner	90	Not limited		Very limited		Not limited	
				Cutbanks cave	1.00		

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
182:							
Stunner, moist------	55	Not limited		Somewhat limited		Not limited	
				Cutbanks cave	0.10		
Emlin---------------	35	Not limited		Somewhat limited		Not limited	
				Cutbanks cave	0.10		
183:							
Styers--------------	45	Very limited		Very limited		Very limited	
		Low strength	1.00	Cutbanks cave	1.00	Slope	1.00
		Shrink-swell	1.00	Slope	1.00	Too clayey	1.00
		Slope	1.00	Too clayey	0.88	Depth to bedrock	0.10
				Depth to soft bedrock	0.10		
Ironsprings---------	25	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
				Slope	1.00	Too sandy	0.50
						Droughty	0.06
Maysprings----------	15	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
				Slope	1.00	Too sandy	0.50
						Droughty	0.04
184:							
Styers--------------	40	Very limited		Very limited		Very limited	
		Low strength	1.00	Cutbanks cave	1.00	Slope	1.00
		Shrink-swell	1.00	Slope	1.00	Depth to bedrock	0.65
		Slope	1.00	Too clayey	0.88		
				Depth to soft bedrock	0.64		
Pinelli-------------	20	Very limited		Very limited		Very limited	
		Low strength	1.00	Slope	1.00	Slope	1.00
		Slope	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				
Taffom--------------	15	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
				Slope	1.00		
185:							
Taffom--------------	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.04	Cutbanks cave	0.10	Slope	0.04
				Slope	0.04		
186:							
Talamantes----------	85	Not limited		Somewhat limited		Not limited	
				Cutbanks cave	0.10		
187:							
Talamantes----------	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.37	Slope	0.37	Slope	0.37
				Cutbanks cave	0.10		
188:							
Talamantes, saline----------	85	Not limited		Somewhat limited		Somewhat limited	
				Cutbanks cave	0.10	Salinity	0.50

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
189:							
Tipper	55	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Droughty	1.00
				Slope	1.00	Slope	1.00
				Depth to soft bedrock	0.64	Depth to bedrock	0.65
Crustown	35	Very limited		Very limited		Very limited	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to bedrock	1.00
						Droughty	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	0.10		
190:							
Tipperary	90	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.84	Cutbanks cave	1.00	Slope	0.84
				Slope	0.84	Too sandy	0.50
						Droughty	0.36
191:							
Tipperary	90	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.29
192:							
Tipperary	50	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.29
Willwood	40	Not limited		Very limited		Very limited	
				Cutbanks cave	1.00	Droughty	1.00
						Content of large stones	0.01
193:							
Tisworth	85	Not limited		Somewhat limited		Very limited	
				Cutbanks cave	0.10	Sodium content	1.00
						Droughty	0.06
194:							
Tolman	50	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
						Droughty	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10		
Duffymont	35	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
						Droughty	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10		

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
195:							
Torriorthents-------	95	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
						Droughty	1.00
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Slope	1.00
						Content of large stones	1.00
		Slope	1.00	Slope	1.00		
		Content of large stones	0.54	Content of large stones	0.54		
				Cutbanks cave	0.10		
196:							
Torriorthents-------	50	Somewhat limited		Very limited		Very limited	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to bedrock	1.00
						Droughty	1.00
		Content of large stones	0.54	Content of large stones	0.54	Content of large stones	1.00
				Cutbanks cave	0.10		
Baston--------------	35	Very limited		Somewhat limited		Very limited	
		Low strength	1.00	Depth to soft bedrock	0.64	Sodium content	1.00
		Shrink-swell	1.00			Depth to bedrock	0.65
		Frost action	0.50	Cutbanks cave	0.10	Droughty	0.20
				Too clayey	0.03		
197:							
Torriorthents-------	60	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
						Slope	1.00
		Slope	1.00	Depth to soft bedrock	1.00	Droughty	1.00
		Depth to soft bedrock	1.00			Content of large stones	0.84
				Slope	1.00		
		Content of large stones	0.66	Content of large stones	0.66	Gravel content	0.01
		Frost action	0.50	Cutbanks cave	0.10		
Rock outcrop, sandstone----------	30	Not rated		Not rated		Not rated	
198:							
Torriorthents-------	60	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to soft bedrock	1.00	Depth to bedrock	1.00
		Depth to soft bedrock	1.00			Droughty	1.00
				Slope	1.00	Salinity	1.00
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				
Rock outcrop, shale--------------	40	Not rated		Not rated		Not rated	
199:							
Torriorthents-------	60	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
						Slope	1.00
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Droughty	1.00
		Slope	1.00	Slope	1.00		
		Shrink-swell	0.50	Cutbanks cave	0.10		
		Frost action	0.50				

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
199:							
Torripsamments	30	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Droughty	1.00
		Depth to hard bedrock	0.79	Cutbanks cave	1.00	Slope	1.00
				Slope	1.00	Depth to bedrock	0.80
				Depth to soft bedrock	0.79	Too sandy	0.50
						Content of large stones	0.01
200:							
Tresano	80	Not limited		Somewhat limited		Not limited	
				Cutbanks cave	0.10		
201:							
Tresano	35	Not limited		Somewhat limited		Not limited	
				Cutbanks cave	0.10		
Hiatha	30	Very limited		Very limited		Very limited	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to bedrock	1.00
		Low strength	1.00	Slope	0.84	Too clayey	1.00
		Shrink-swell	1.00	Cutbanks cave	0.10	Droughty	0.98
		Slope	0.84			Slope	0.84
Kandaly	15	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.91
202:							
Turzo	90	Somewhat limited		Somewhat limited		Not limited	
		Low strength	0.22	Cutbanks cave	0.10		
203:							
Turzo, saline	90	Not limited		Somewhat limited		Not limited	
				Cutbanks cave	0.10		
204:							
Typic Natrargids	80	Very limited		Somewhat limited		Very limited	
		Low strength	1.00	Cutbanks cave	0.10	Sodium content	1.00
		Shrink-swell	0.50				
205:							
Uffens	90	Not limited		Very limited		Very limited	
				Cutbanks cave	1.00	Sodium content	1.00
206:							
Ustorthents, frigid	55	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Content of large stones	1.00	Slope	1.00	Content of large stones	1.00
		Depth to hard bedrock	0.64	Content of large stones	1.00	Droughty	0.88
		Frost action	0.50	Depth to soft bedrock	0.64	Gravel content	0.79
				Cutbanks cave	0.10	Depth to bedrock	0.65

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
206:							
Borolls	35	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00	Depth to bedrock	0.10
		Depth to hard bedrock	0.10	Cutbanks cave	0.10		
				Depth to soft bedrock	0.10		
207:							
Vermillion	40	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.96	Depth to hard bedrock	1.00	Slope	0.96
		Depth to hard bedrock	0.64	Slope	0.96	Depth to bedrock	0.65
				Cutbanks cave	0.10	Droughty	0.22
Langspring	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.96	Slope	0.96	Slope	0.96
		Frost action	0.50	Cutbanks cave	0.10		
208:							
Wallson	50	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.04	Cutbanks cave	0.10	Slope	0.04
				Slope	0.04		
Tricera	35	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.04	Cutbanks cave	1.00	Droughty	0.08
				Slope	0.04	Slope	0.04
209:							
Weed	85	Not limited		Somewhat limited		Not limited	
				Cutbanks cave	0.10		
210:							
Willwood	55	Very limited		Very limited		Very limited	
		Content of large stones	1.00	Cutbanks cave	1.00	Droughty	1.00
				Content of large stones	1.00	Content of large stones	0.01
Sheppard, cool	35	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.08
211:							
Willwood	55	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Droughty	1.00
		Content of large stones	1.00	Slope	1.00	Content of large stones	1.00
				Content of large stones	1.00	Slope	1.00
Tipperary	35	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
				Slope	1.00	Droughty	0.29
212:							
Willwood	60	Somewhat limited		Very limited		Very limited	
		Content of large stones	0.95	Cutbanks cave	1.00	Droughty	1.00
				Content of large stones	0.95	Content of large stones	0.01

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
212:							
Tipperary, cobbly substratum	25	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.14
213:							
Winevada	60	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.96	Depth to hard bedrock	1.00	Slope	0.96
		Depth to hard bedrock	0.84	Slope	0.96	Depth to bedrock	0.84
		Frost action	0.50	Cutbanks cave	0.10		
Splitro	30	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	0.96	Slope	0.96	Droughty	1.00
		Frost action	0.50	Cutbanks cave	0.10	Slope	0.96
214:							
Winevada	60	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Depth to hard bedrock	0.79	Slope	1.00	Depth to bedrock	0.80
		Frost action	0.50	Cutbanks cave	0.10		
Splitro	30	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10	Droughty	1.00
215:							
Winkleman	85	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Depth to saturated zone	0.90		
		Shrink-swell	0.50	Cutbanks cave	0.10		
		Flooding	0.40				
216:							
Yamo	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Frost action	0.50	Cutbanks cave	0.10	Slope	0.04
		Slope	0.04	Slope	0.04		
217:							
Yamo	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10		
218:							
Yellowwash	50	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	0.16	Slope	0.16	Droughty	1.00
				Cutbanks cave	0.10	Salinity	1.00
						Gravel content	0.41
						Slope	0.16
Piezon	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.16	Depth to soft bedrock	0.46	Depth to bedrock	0.46
				Slope	0.16	Slope	0.16
				Cutbanks cave	0.10		

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
219:							
Youga	90	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Cutbanks cave	0.10	Slope	0.04
		Shrink-swell	0.50	Slope	0.04		
		Frost action	0.50				
		Slope	0.04				
220:							
Youga	50	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Cutbanks cave	0.10		
Dinnen	40	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
221:							
Youga	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10	Content of large stones	1.00
Gelkie	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10	Content of large stones	1.00
Clayburn, warm	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10		
222:							
Youngston, cool	90	Somewhat limited		Somewhat limited		Not limited	
		Flooding	0.40	Depth to saturated zone	0.15		
				Cutbanks cave	0.10		
223:							
Youngston, well drained	90	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Flooding	0.40				
224:							
Zillion	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Content of large stones	0.35	Content of large stones	0.03
		Content of large stones	0.35	Cutbanks cave	0.10		
Barkelew, moist	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.54	Content of large stones	0.54	Content of large stones	0.99
				Cutbanks cave	0.10	Gravel content	0.38
						Droughty	0.01

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
224:							
Grapit	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	0.10	Carbonate content	1.00
						Content of large stones	0.20
						Gravel content	0.09
225:							
Abracon	45	Not limited		Somewhat limited		Not limited	
				Cutbanks cave	0.10		
Solirec	40	Somewhat limited		Somewhat limited		Not limited	
		Shrink-swell	0.50	Cutbanks cave	0.10		
226:							
Arches	45	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
						Droughty	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	0.10		
Mespun	20	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
				Slope	1.00	Droughty	0.34
Rock outcrop	20	Not rated		Not rated		Not rated	
227:							
Bankard family	55	Somewhat limited		Very limited		Somewhat limited	
		Flooding	0.40	Cutbanks cave	1.00	Too sandy	0.50
						Droughty	0.35
Cameo	35	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Cutbanks cave	0.10		
		Flooding	0.40				
228:							
Bondman	50	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
						Droughty	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10		
Rock outcrop	35	Not rated		Not rated		Not rated	
229:							
Cameo	85	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Cutbanks cave	0.10		
		Flooding	0.40				
230:							
Cragnot	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Content of large stones	0.19	Carbonate content	1.00
		Content of large stones	0.19	Cutbanks cave	0.10	Content of large stones	0.99
						Gravel content	0.85
						Droughty	0.83

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
230:							
Pensore	35	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
						Droughty	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.96	Content of large stones	0.96	Carbonate content	1.00
						Content of large stones	0.20
				Cutbanks cave	0.10		
Grapit	15	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
		Content of large stones	0.33	Slope	1.00	Carbonate content	1.00
				Content of large stones	0.33	Droughty	0.80
						Content of large stones	0.20
						Gravel content	0.03
231:							
Green River	70	Very limited		Very limited		Somewhat limited	
		Frost action	1.00	Cutbanks cave	1.00	Droughty	0.04
		Flooding	0.40	Depth to saturated zone	0.95		
Fluvaquents	15	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Flooding	1.00	Cutbanks cave	1.00	Depth to saturated zone	1.00
		Frost action	0.50	Flooding	0.80		
232:							
Lakebench	50	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00		
Strell	35	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
						Droughty	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	0.10		
233:							
Lakebench	50	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00		
Yampa	35	Very limited		Very limited		Very limited	
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10	Droughty	0.70
234:							
Mantlemine	85	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Cutbanks cave	0.10		
235:							
Mantlemine	55	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Cutbanks cave	0.10		

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
235:							
Emlin	30	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Frost action	0.50				
236:							
Mido	85	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.01
237:							
Mikim loam	55	Somewhat limited		Somewhat limited		Not limited	
		Shrink-swell	0.50	Cutbanks cave	0.10		
		Low strength	0.22				
Mikim silt loam	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Cutbanks cave	0.10	Salinity	0.50
238:							
Milok	85	Not limited		Somewhat limited		Not limited	
				Cutbanks cave	0.10		
239:							
Milok	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	0.10		
Solirec	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	0.10		
Strych	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Content of large stones	1.00
		Content of large stones	1.00	Content of large stones	1.00	Slope	1.00
				Cutbanks cave	0.10	Droughty	0.33
240:							
Milok	70	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	0.10		
Strych	20	Somewhat limited		Very limited		Very limited	
		Slope	0.96	Cutbanks cave	1.00	Content of large stones	1.00
		Content of large stones	0.93	Slope	0.96	Slope	0.96
				Content of large stones	0.93	Droughty	0.85
						Gravel content	0.11
241:							
Pensore	60	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Droughty	1.00
		Content of large stones	0.96	Content of large stones	0.96	Slope	1.00
				Cutbanks cave	0.10	Carbonate content	1.00
						Content of large stones	0.20

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
241:							
Roto	25	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Droughty	1.00
		Depth to hard bedrock	0.97	Cutbanks cave	1.00	Slope	1.00
		Content of large stones	0.08	Slope	1.00	Carbonate content	1.00
				Content of large stones	0.08	Depth to bedrock	0.97
						Content of large stones	0.9
242:							
Riverwash	85	Not rated		Not rated		Not rated	
243:							
Rizno	35	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	0.96	Slope	0.96	Droughty	1.00
		Frost action	0.50	Content of large stones	0.32	Content of large stones	1.00
		Content of large stones	0.32	Cutbanks cave	0.10	Slope	0.96
Windcomb	35	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	0.96	Slope	0.96	Gravel content	1.00
				Cutbanks cave	0.10	Droughty	1.00
						Slope	0.96
Anasazi	15	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.96	Depth to hard bedrock	1.00	Slope	0.96
		Depth to hard bedrock	0.90	Cutbanks cave	1.00	Depth to bedrock	0.90
		Frost action	0.50	Slope	0.96	Droughty	0.80
						Content of large stones	0.08
244:							
Rock outcrop	60	Not rated		Not rated		Not rated	
Hackling	30	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Droughty	1.00
		Content of large stones	1.00	Content of large stones	1.00	Slope	1.00
				Cutbanks cave	0.10	Content of large stones	0.20
						Gravel content	0.09
245:							
Rock outcrop	30	Not rated		Not rated		Not rated	
Torriorthents	30	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10	Droughty	1.00
		Content of large stones	0.01	Content of large stones	0.01	Content of large stones	0.95
						Gravel content	0.90

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
245:							
Ustorthents	30	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Frost action	0.50			Content of large stones	1.00
		Content of large stones	0.20	Slope	1.00		
		Depth to hard bedrock	0.20	Content of large stones	0.20	Depth to bedrock	0.20
				Cutbanks cave	0.10	Droughty	0.01
246:							
Schoonover	55	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	0.96	Slope	0.96	Droughty	1.00
		Frost action	0.50	Cutbanks cave	0.10	Gravel content	1.00
						Slope	0.96
						Content of large stones	0.54
Duffymont	30	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
		Slope	0.96	Slope	0.96	Droughty	1.00
		Frost action	0.50	Cutbanks cave	0.10	Slope	0.96
247:							
Stout	60	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Droughty	1.00
				Cutbanks cave	0.10	Slope	1.00
						Content of large stones	0.01
Rock outcrop	30	Not rated		Not rated		Not rated	
248:							
Strych	50	Very limited		Very limited		Very limited	
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	0.10	Droughty	0.33
Mellenthin	35	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Content of large stones	1.00	Content of large stones	1.00	Droughty	1.00
		Slope	1.00	Slope	1.00	Content of large stones	1.00
		Frost action	0.50	Cutbanks cave	0.10	Slope	1.00
249:							
Zillion	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.72	Content of large stones	0.72	Content of large stones	0.03
		Frost action	0.50	Cutbanks cave	0.10	Droughty	0.01

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
249:							
Yampa	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
		Frost action	0.50	Cutbanks cave	0.10	Droughty	0.70
Clyl	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	1.00	Cutbanks cave	0.10	Gravel content	1.00
		Content of large stones	0.03	Content of large stones	0.03	Carbonate content	1.00
						Droughty	0.01
						Content of large stones	0.01
250:							
Abracon	85	Not limited		Somewhat limited		Not limited	
				Cutbanks cave	0.10		
251:							
Badland	60	Not rated		Not rated		Very limited	
						Depth to bedrock	1.00
						Slope	1.00
						Droughty	1.00
						Salinity	1.00
						Too clayey	1.00
Renegade	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
		Frost action	0.50	Cutbanks cave	0.10	Droughty	0.12
252:							
Bigtom	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00	Droughty	0.98
		Frost action	0.50	Cutbanks cave	0.10		
Namlot	20	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.97	Content of large stones	0.97	Content of large stones	1.00
		Frost action	0.50	Cutbanks cave	0.10	Droughty	1.00
						Gravel content	0.04
Dokie	15	Very limited		Very limited		Very limited	
		Content of large stones	1.00	Content of large stones	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Droughty	1.00
				Cutbanks cave	0.10		
253:							
Clapper	85	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.96	Cutbanks cave	1.00	Slope	0.96
				Slope	0.96	Gravel content	0.32
						Droughty	0.05

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
254:							
Cliff	85	Not limited		Somewhat limited		Not limited	
				Cutbanks cave	0.10		
255:							
Clyl	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	1.00	Content of large stones	0.70	Carbonate content	1.00
		Content of large stones	0.70	Cutbanks cave	0.10	Content of large stones	0.32
						Droughty	0.22
						Gravel content	0.07
Pinerid	40	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Droughty	1.00
		Frost action	0.50	Cutbanks cave	0.10	Carbonate content	1.00
						Slope	1.00
						Content of large stones	0.99
256:							
Cortyzack	65	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Slope	0.96	Slope	0.96
		Slope	0.96	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Frost action	0.50				
Diagulch	20	Somewhat limited		Very limited		Somewhat limited	
		Frost action	0.50	Cutbanks cave	1.00	Slope	0.04
		Slope	0.04	Slope	0.04		
257:							
Cortyzack	55	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Slope	0.96	Slope	0.96
		Slope	0.96	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Frost action	0.50				
Duffymont	30	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
		Slope	0.96	Slope	0.96	Droughty	1.00
		Frost action	0.50	Cutbanks cave	0.10	Slope	0.96
258:							
Cortyzack	45	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Slope	0.96	Slope	0.96
		Slope	0.96	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Frost action	0.50				
Flynncove	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.93	Content of large stones	0.93	Content of large stones	0.92
		Frost action	0.50	Cutbanks cave	0.10	Droughty	0.48

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
259:							
Denco	45	Very limited		Very limited		Very limited	
		Low strength	1.00	Cutbanks cave	1.00	Slope	1.00
		Shrink-swell	1.00	Slope	1.00	Depth to bedrock	0.03
		Slope	1.00	Too clayey	0.12		
				Depth to soft bedrock	0.03		
Gerst	40	Very limited		Very limited		Very limited	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Droughty	1.00
				Cutbanks cave	0.10	Slope	1.00
						Content of large stones	0.01
260:							
Dokie	70	Very limited		Very limited		Very limited	
		Content of large stones	1.00	Content of large stones	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Droughty	1.00
				Cutbanks cave	0.10		
Flynncove	15	Very limited		Very limited		Very limited	
		Content of large stones	1.00	Content of large stones	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Content of large stones	1.00
		Frost action	0.50	Cutbanks cave	0.10	Droughty	1.00
261:							
Dokie	50	Very limited		Very limited		Very limited	
		Content of large stones	1.00	Content of large stones	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Droughty	1.00
				Cutbanks cave	0.10		
Namlot	40	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.97	Content of large stones	0.97	Content of large stones	1.00
		Frost action	0.50	Cutbanks cave	0.10	Droughty	1.00
						Gravel content	0.04
262:							
Gompers	85	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Droughty	1.00
		Frost action	0.50	Cutbanks cave	0.10	Gravel content	1.00
						Slope	1.00
						Content of large stones	0.03
263:							
Hanksville	85	Very limited		Somewhat limited		Somewhat limited	
		Shrink-swell	1.00	Slope	0.96	Slope	0.96
		Low strength	1.00	Depth to soft bedrock	0.20	Depth to bedrock	0.20
		Slope	0.96	Too clayey	0.15	Salinity	0.13
				Cutbanks cave	0.10		

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
264:							
Mikim	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Cutbanks cave	0.10	Slope	0.04
		Slope	0.04	Slope	0.04		
265:							
Mikim	85	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Cutbanks cave	0.10	Sodium content	1.00
						Salinity	0.50
266:							
Rock outcrop	40	Not rated		Not rated		Not rated	
Boxring	25	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
		Slope	1.00	Slope	1.00	Droughty	1.00
		Frost action	0.50	Cutbanks cave	0.10	Slope	1.00
Tridell	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.87	Content of large stones	0.87	Content of large stones	1.00
		Frost action	0.50	Cutbanks cave	0.10	Droughty	0.40
						Gravel content	0.04
267:							
Solirec	35	Not limited		Somewhat limited		Not limited	
				Cutbanks cave	0.10		
Abracon	30	Not limited		Somewhat limited		Not limited	
				Cutbanks cave	0.10		
Begay	20	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.04	Cutbanks cave	0.10	Slope	0.04
				Slope	0.04		
268:							
Toliver	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00	Content of large stones	1.00
		Frost action	0.50	Cutbanks cave	0.10	Droughty	0.28
Rock outcrop	30	Not rated		Not rated		Not rated	
269:							
Walknolls	60	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	0.10	Droughty	1.00
						Gravel content	1.00
						Content of large stones	0.84

Table 12.--Building site development--Local roads and streets, shallow excavations, and lawns and landscaping--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
269:							
Badland	15	Not rated		Not rated		Very limited	
						Depth to bedrock	1.00
						Slope	1.00
						Droughty	1.00
						Salinity	1.00
						Too clayey	1.00
Rock outcrop	10	Not rated		Not rated		Not rated	
270:							
Walknolls	55	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
						Droughty	1.00
		Slope	1.00	Slope	1.00	Gravel content	1.00
				Cutbanks cave	0.10	Slope	1.00
						Content of large stones	0.03
Gilston	35	Not limited		Very limited		Very limited	
				Cutbanks cave	1.00	Sodium content	1.00
						Droughty	0.06
						Content of large stones	0.01
271:							
Water	95	Not rated		Not rated		Not rated	

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
1:					
Abor	85	Very limited		Very limited	
		Restricted permeability	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Slope	1.00		
2:					
Abor	80	Very limited		Very limited	
		Restricted permeability	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Slope	1.00		
3:					
Adderton	90	Somewhat limited		Somewhat limited	
		Restricted permeability	0.46	Slope	0.92
		Flooding	0.40	Flooding	0.40
4:					
Almy	90	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	0.04	Seepage	0.53
5:					
Apmay	90	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Filtering capacity	1.00	Depth to saturated zone	1.00
		Restricted permeability	0.46	Flooding	0.40
		Flooding	0.40		
6:					
Avalon	45	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
Mack	45	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
				Seepage	0.53
7:					
Avalon	30	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Depth to bedrock	0.98	Depth to soft bedrock	0.93

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
7:					
Persayo, moist------	25	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
Degater-------------	20	Very limited		Very limited	
		Restricted permeability	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Slope	1.00		
8:					
Badland-------------	90	Not rated		Very limited	
				Depth to soft bedrock	1.00
				Slope	1.00
9:					
Baroid--------------	55	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Restricted permeability	0.46	Flooding	0.40
		Flooding	0.40		
Eghelm--------------	35	Somewhat limited		Very limited	
		Flooding	0.40	Seepage	1.00
		Depth to saturated zone	0.08	Flooding	0.40
10:					
Battlement----------	85	Somewhat limited		Somewhat limited	
		Restricted permeability	0.72	Flooding	0.40
		Flooding	0.40	Seepage	0.28
11:					
Battlement, saline-------------	80	Very limited		Somewhat limited	
		Restricted permeability	1.00	Seepage	0.53
		Depth to saturated zone	0.94	Flooding	0.40
		Flooding	0.40	Depth to saturated zone	0.39
12:					
Berlake-------------	85	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	1.00
13:					
Berlake-------------	85	Very limited		Very limited	
		Filtering capacity	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
14:					
Berlake	55	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	1.00
		Restricted permeability	0.46		
Maysprings	30	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	1.00
15:					
Berlake	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	0.46	Seepage	0.53
Taffom	30	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	0.46	Seepage	1.00
Gretdivid	15	Very limited		Very limited	
		Filtering capacity	1.00	Slope	1.00
				Seepage	1.00
		Slope	1.00		
16:					
Bilhil	85	Very limited		Somewhat limited	
		Restricted permeability	1.00	Depth to saturated zone	0.71
		Depth to saturated zone	1.00		
17:					
Binco	90	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	1.00		
18:					
Boltus	50	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
				Slope	1.00
Beamton	25	Very limited		Very limited	
		Restricted permeability	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
19:					
Borollic Natrargids	40	Very limited		Somewhat limited	
		Restricted permeability	1.00	Slope	0.08

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
19:					
Borollic Haplargids	30	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	0.63	Seepage	0.53
Ustic Torrifluvents	25	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.84	Flooding	0.40
		Restricted permeability	0.72	Seepage	0.28
		Flooding	0.40	Depth to saturated zone	0.17
20:					
Brownsto	50	Somewhat limited		Very limited	
		Slope	0.96	Slope	1.00
		Restricted permeability	0.46	Seepage	0.53
Castee	30	Somewhat limited		Very limited	
		Slope	0.96	Seepage	1.00
		Restricted permeability	0.46	Slope	1.00
21:					
Bulkley	80	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	1.00		
22:					
Bulkley	80	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
23:					
Bulkley	90	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	1.00		
24:					
Bulkley	60	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	1.00		
Quilt	25	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	1.00		
25:					
Campspass	90	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
26:					
Campspass	90	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	1.00		
27:					
Canlodore	95	Very limited		Very limited	
		Filtering capacity	1.00	Slope	1.00
				Seepage	1.00
		Slope	1.00	Content of large stones	1.00
		Content of large stones	0.45		
				Content of organic matter	1.00
28:					
Carbol	40	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
				Slope	0.92
				Seepage	0.53
Irigul	25	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	0.96		
				Slope	1.00
				Seepage	0.28
Rock outcrop	25	Not rated		Not rated	
29:					
Carbol	45	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
				Slope	1.00
				Seepage	0.53
Miracle	30	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Restricted permeability	0.46		
				Slope	1.00
				Seepage	0.53
30:					
Carmody	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	0.37		
				Seepage	1.00
				Slope	1.00
Rock River	30	Somewhat limited		Very limited	
		Restricted permeability	0.46	Seepage	1.00
				Slope	1.00
		Slope	0.37		
Crestman	20	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	0.37		
				Seepage	1.00
				Slope	1.00

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
31:					
Castee	90	Somewhat limited		Very limited	
		Restricted permeability	0.46	Seepage	1.00
				Slope	1.00
32:					
Chroder	80	Not limited		Very limited	
				Seepage	1.00
				Slope	1.00
33:					
Clayburn, warm	85	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	0.96	Seepage	0.53
34:					
Clayburn	40	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	0.46	Seepage	1.00
Foidel	30	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	0.46	Seepage	0.53
35:					
Clayburn	45	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	1.00	Seepage	0.53
Youga, moist	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	1.00	Content of organic matter	1.00
				Seepage	0.53
36:					
Clifsand	60	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	1.00
		Content of large stones	0.27	Content of large stones	0.01
Chroder	30	Not limited		Very limited	
				Seepage	1.00
				Slope	1.00
37:					
Cochetopa	85	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
				Seepage	0.28
		Slope	1.00		

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
38:					
Cochetopa	85	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	1.00		
39:					
Cochetopa, warm	85	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
				Seepage	0.28
40:					
Cochetopa	45	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	0.84		
Gothic	40	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	1.00	Content of large stones	1.00
		Content of large stones	0.01		
41:					
Cochetopa	40	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	1.00	Content of large stones	1.00
Gothic	35	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	1.00	Content of large stones	0.01
42:					
Cochetopa	50	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	0.04		
Jerry	35	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	0.04	Content of large stones	0.04
43:					
Coldspring, moist	80	Somewhat limited		Very limited	
		Depth to bedrock	0.89	Slope	1.00
		Restricted permeability	0.46	Depth to hard bedrock	0.71
				Seepage	0.53
44:					
Cowestglen	80	Somewhat limited		Very limited	
		Flooding	0.40	Seepage	1.00
				Flooding	0.40

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
45:					
Coyet	90	Not limited		Very limited	
				Seepage	1.00
				Slope	1.00
46:					
Coyet	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
				Seepage	1.00
47:					
Coyet	45	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Depth to bedrock	0.86	Seepage	1.00
				Depth to soft bedrock	0.61
Crestman, moist	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
				Seepage	1.00
48:					
Crago	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	0.46	Seepage	0.53
				Content of large stones	0.01
Pensore	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
				Seepage	0.53
Grapit	15	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	1.00	Content of large stones	0.28
		Content of large stones	0.01		
49:					
Cryoborolls, Slumped	85	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	1.00		
50:					
Cushool	85	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Restricted permeability	0.46	Slope	1.00
				Seepage	0.53

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
51:					
Cushool	85	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Restricted permeability	0.46	Seepage	0.53
52:					
Danavore	45	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
		Content of large stones	0.34	Content of large stones	1.00
				Seepage	0.28
Waybe	30	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
53:					
Davtone	45	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	1.00	Seepage	0.53
Forsey	30	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Content of large stones	1.00	Seepage	1.00
		Restricted permeability	0.46	Content of large stones	1.00
54:					
Deaver	50	Very limited		Very limited	
		Restricted permeability	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Slope	1.00		
Avalon	30	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	0.04		
55:					
Deaver	60	Very limited		Very limited	
		Restricted permeability	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Slope	1.00		
Chipeta	30	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
56:					
Debone	90	Very limited		Somewhat limited	
		Restricted permeability	1.00	Seepage	0.53
57:					
Detra	50	Somewhat limited		Very limited	
		Restricted permeability	0.46	Slope	1.00
				Seepage	0.53
Cortyzack	40	Somewhat limited		Very limited	
		Restricted permeability	0.72	Slope	1.00
				Seepage	0.53
58:					
Diaflats	45	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Restricted permeability	0.46	Slope	1.00
		Slope	0.04	Seepage	0.53
Fondillas	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Content of large stones	0.25	Slope	1.00
		Slope	0.04	Content of large stones	0.21
59:					
Dranyon	90	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	0.63	Content of organic matter	1.00
				Seepage	0.53
60:					
Dumps, mine	100	Not rated		Not rated	
61:					
Ecklund	50	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
				Seepage	1.00
				Slope	1.00
Tipperary	40	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	1.00
62:					
Eghelm	90	Somewhat limited		Very limited	
		Flooding	0.40	Seepage	1.00
				Flooding	0.40
63:					
Eghelm, moist	90	Somewhat limited		Very limited	
		Flooding	0.40	Seepage	1.00
		Depth to saturated zone	0.08	Flooding	0.40

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
64:					
Emlin	85	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
65:					
Emlin	65	Very limited		Somewhat limited	
		Restricted permeability	1.00	Slope	0.92
Tymosling	20	Very limited		Very limited	
		Restricted permeability	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Slope	0.16		
66:					
Evanot	90	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
				Seepage	0.53
67:					
Evanot	85	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
				Seepage	0.53
		Slope	1.00		
68:					
Evanot	50	Somewhat limited		Very limited	
		Slope	0.63	Slope	1.00
		Restricted permeability	0.46	Seepage	0.53
Yamo	25	Somewhat limited		Very limited	
		Slope	0.63	Slope	1.00
		Restricted permeability	0.46	Seepage	0.53
69:					
Fenster	45	Somewhat limited		Very limited	
		Restricted permeability	0.46	Slope	1.00
				Seepage	0.53
Thenipel	30	Somewhat limited		Very limited	
		Restricted permeability	0.46	Slope	1.00
				Seepage	0.53
70:					
Fluvaquents, frequently flooded	50	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Filtering capacity	1.00	Seepage	1.00
				Content of large stones	0.02

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
70:					
Haplaquolls, frequently flooded	45	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Seepage	1.00
		Filtering capacity	1.00	Depth to saturated zone	1.00
		Restricted permeability	0.72		
71:					
Flygare, dry	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	1.00	Content of organic matter	1.00
		Content of large stones	0.11	Seepage	0.53
72:					
Foidel, cool	85	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	0.96	Content of organic matter	1.00
				Seepage	0.53
73:					
Foidel	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	1.00	Content of organic matter	1.00
				Seepage	0.53
74:					
Foidel, moist	35	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	0.96	Content of organic matter	1.00
				Seepage	0.53
Flygare	30	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	0.96	Content of organic matter	1.00
		Content of large stones	0.11	Seepage	0.53
Skyway, moist	20	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	0.96	Seepage	1.00
				Slope	1.00
75:					
Fonce	90	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Restricted permeability	0.46	Slope	0.68

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
76:					
Fonce	90	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	1.00
77:					
Forelle	85	Somewhat limited		Very limited	
		Restricted permeability	0.46	Seepage	1.00
				Slope	1.00
78:					
Forelle	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	0.46	Seepage	1.00
79:					
Forelle	50	Somewhat limited		Very limited	
		Restricted permeability	0.46	Seepage	1.00
				Slope	1.00
Evanot	40	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
				Seepage	0.53
80:					
Forelle	50	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	0.46	Seepage	1.00
Evanot	40	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
				Seepage	0.53
		Slope	1.00		
81:					
Forelle	40	Somewhat limited		Somewhat limited	
		Restricted permeability	0.46	Slope	0.68
				Seepage	0.53
Obadia	35	Very limited		Somewhat limited	
		Restricted permeability	1.00	Slope	0.68
82:					
Forelle	30	Somewhat limited		Very limited	
		Slope	0.84	Slope	1.00
		Restricted permeability	0.46	Seepage	0.53
Pinelli	30	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	0.84		
Maysprings	15	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	1.00
		Slope	0.84		

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
83:					
Forsey	50	Very limited		Very limited	
		Content of large stones	1.00	Seepage	1.00
		Slope	0.96	Content of large stones	1.00
		Restricted permeability	0.46	Slope	1.00
Libeg	30	Somewhat limited		Very limited	
		Restricted permeability	0.46	Slope	1.00
		Slope	0.04	Seepage	0.53
		Content of large stones	0.01		
84:					
Gebson, moist	55	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	0.46	Seepage	0.53
				Content of large stones	0.05
Youga	35	Somewhat limited		Very limited	
		Slope	0.16	Seepage	1.00
				Slope	1.00
85:					
Giarch	90	Very limited		Very limited	
		Restricted permeability	1.00	Seepage	1.00
		Filtering capacity	1.00	Flooding	0.40
		Depth to saturated zone	0.40		
		Flooding	0.40		
86:					
Gracot	50	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Slope	1.00	Slope	1.00
Maybell	30	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Slope	1.00	Slope	1.00
87:					
Gretdivid	35	Very limited		Very limited	
		Filtering capacity	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
Taffom	25	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	0.46	Seepage	1.00

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
87:					
Abor	15	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
88:					
Grieves	85	Not limited		Very limited	
				Seepage	1.00
				Slope	1.00
89:					
Grieves	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
				Seepage	1.00
90:					
Grieves	45	Very limited		Very limited	
		Slope	1.00	Slope	1.00
				Seepage	1.00
Crestman	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
				Seepage	1.00
91:					
Grieves	40	Very limited		Very limited	
		Slope	1.00	Seepage	1.00
				Slope	1.00
Yamo	25	Somewhat limited		Very limited	
		Restricted permeability	0.46	Slope	1.00
		Slope	0.04	Seepage	0.53
Crestman	20	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
				Seepage	1.00
92:					
Grimm	50	Very limited		Very limited	
		Filtering capacity	1.00	Slope	1.00
				Seepage	1.00
		Slope	1.00	Content of large stones	1.00
		Content of large stones	0.89		
Ustic Torriorthents, shallow	40	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
				Seepage	0.28
				Content of large stones	0.01

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
93:					
Gullied land--------	85	Very limited		Not rated	
		Flooding	1.00		
		Restricted permeability	1.00		
94:					
Hapney, moist-------	90	Very limited		Not limited	
		Restricted permeability	1.00		
		Depth to saturated zone	0.40		
95:					
Haterton------------	60	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
				Slope	1.00
				Seepage	0.53
Piezon--------------	30	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
				Slope	1.00
				Seepage	0.53
96:					
Heathcoat-----------	85	Very limited		Somewhat limited	
		Restricted permeability	1.00	Slope	0.32
				Content of large stones	0.13
97:					
Heathcoat-----------	60	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	0.84		
Clayburn------------	25	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
				Seepage	0.53
		Slope	1.00		
98:					
Herm----------------	50	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
				Content of large stones	0.95
		Slope	1.00		
Fughes--------------	35	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
				Content of large stones	1.00
		Slope	1.00		
		Content of large stones	0.01		

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
99:					
Hesperus, dry	85	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	0.04	Seepage	0.53
100:					
Hesperus	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	1.00		
101:					
Hesperus	90	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	0.96		
102:					
Holter	55	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Content of large stones	0.86	Content of large stones	1.00
		Restricted permeability	0.46	Seepage	0.53
Detra	30	Very limited		Very limited	
		Restricted permeability	1.00	Seepage	1.00
				Slope	1.00
103:					
Iles	85	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
				Seepage	0.28
104:					
Ironco	60	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00
		Restricted permeability	0.46	Seepage	0.53
Mulgon, dry	25	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	1.00	Content of large stones	1.00
		Content of large stones	1.00	Seepage	1.00
				Content of organic matter	1.00
105:					
Ironsprings	85	Not limited		Very limited	
				Seepage	1.00
				Slope	1.00

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
106:					
Ironsprings	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
				Seepage	1.00
107:					
Ironsprings	40	Very limited		Very limited	
		Slope	1.00	Slope	1.00
				Seepage	1.00
Maysprings	25	Very limited		Very limited	
		Filtering capacity	1.00	Slope	1.00
				Seepage	1.00
		Slope	1.00		
		Restricted permeability	0.46		
Gretdivid	15	Very limited		Very limited	
		Filtering capacity	1.00	Slope	1.00
				Seepage	1.00
		Slope	1.00		
108:					
Jerry	50	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
				Content of organic matter	1.00
		Slope	1.00		
Cochetopa	35	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	1.00		
109:					
Joebas	60	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00		
				Slope	1.00
				Seepage	0.53
Rock outcrop	30	Not rated		Not rated	
110:					
Kemmerer	80	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00		
				Slope	1.00
111:					
Kemmerer	50	Very limited		Very limited	
		Restricted permeability	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Slope	1.00		

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
111:					
Grapit	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	0.46	Content of large stones	0.81
		Content of large stones	0.06	Seepage	0.53
112:					
Kemmerer	45	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
Moyerson	40	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
113:					
Kemmerer	60	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
Yamo	20	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	0.46	Seepage	0.53
114:					
Lamphier	85	Somewhat limited		Very limited	
		Slope	0.96	Seepage	1.00
		Restricted permeability	0.46	Slope	1.00
				Content of organic matter	1.00
115:					
Lamphier	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	0.46	Seepage	1.00
				Content of organic matter	1.00
116:					
Lamphier	45	Somewhat limited		Very limited	
		Slope	0.96	Seepage	1.00
		Restricted permeability	0.46	Slope	1.00
				Content of organic matter	1.00
Jerry	30	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	0.96		

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
117:					
Lamphier	45	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	0.46	Seepage	1.00
				Content of organic matter	1.00
Jerry	30	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	1.00		
118:					
Lander	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Filtering capacity	1.00	Depth to saturated zone	1.00
		Restricted permeability	1.00	Flooding	0.40
		Flooding	0.40		
119:					
Langspring	85	Somewhat limited		Very limited	
		Restricted permeability	0.46	Slope	1.00
				Seepage	0.53
120:					
Layoint	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
				Seepage	1.00
				Slope	0.68
Moosed	25	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	0.37	Seepage	1.00
				Slope	1.00
Berlake	20	Somewhat limited		Very limited	
		Restricted permeability	0.46	Slope	1.00
				Seepage	0.53
121:					
Leaps	90	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	0.04	Content of organic matter	1.00
122:					
Leswill	50	Very limited		Somewhat limited	
		Restricted permeability	1.00	Slope	0.32
Rogrube	30	Very limited		Somewhat limited	
		Restricted permeability	1.00	Slope	0.32

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
123:					
Lilsnake	45	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	0.63	Slope	1.00
				Seepage	0.53
Sandwash	30	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Content of large stones	0.75	Slope	1.00
		Restricted permeability	0.46	Seepage	0.53
124:					
Losee	45	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Content of large stones	0.84	Seepage	1.00
		Restricted permeability	0.46	Content of large stones	1.00
Thornburgh, dry	30	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Content of large stones	1.00	Seepage	1.00
				Content of large stones	1.00
125:					
Massadona	85	Very limited		Somewhat limited	
		Restricted permeability	1.00	Slope	0.92
126:					
Massadona	65	Very limited		Somewhat limited	
		Restricted permeability	1.00	Slope	0.68
Youngston, moist	20	Very limited		Somewhat limited	
		Restricted permeability	1.00	Flooding	0.40
		Flooding	0.40		
127:					
Maudlin	50	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Restricted permeability	0.46	Slope	1.00
		Slope	0.04	Seepage	0.53
Duffymont	30	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Content of large stones	1.00	Content of large stones	1.00
		Slope	0.04	Slope	1.00

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
128:					
Maybell	90	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	1.00
129:					
Maybell	90	Very limited		Very limited	
		Filtering capacity	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
130:					
Maysprings	85	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	1.00
131:					
Maysprings	50	Very limited		Very limited	
		Filtering capacity	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
Gretdivid	30	Very limited		Very limited	
		Filtering capacity	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
132:					
Milren	80	Very limited		Somewhat limited	
		Restricted permeability	1.00	Slope	0.68
133:					
Miracle	50	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Restricted permeability	0.46	Slope	1.00
				Seepage	0.53
Coldspring	30	Somewhat limited		Very limited	
		Depth to bedrock	0.89	Slope	1.00
		Restricted permeability	0.46	Depth to hard bedrock	0.71
				Seepage	0.53
134:					
Morapos	85	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
135:					
Morapos	85	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	1.00		
136:					
Morapos	40	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
136:					
Pagoda	40	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
137:					
Morset	50	Not limited		Very limited	
				Seepage	1.00
				Slope	1.00
Youga	30	Somewhat limited		Very limited	
		Restricted permeability	0.46	Seepage	1.00
				Slope	1.00
138:					
Moyerson	50	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00		
				Slope	1.00
Rentsac	30	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00		
		Content of large stones	0.08	Slope	1.00
				Content of large stones	0.01
139:					
Muggins	85	Very limited		Very limited	
		Restricted permeability	1.00	Seepage	1.00
				Slope	1.00
		Slope	0.63	Content of organic matter	1.00
140:					
Ninot	50	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	0.46	Seepage	0.53
Crago	20	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	0.46	Seepage	0.53
				Content of large stones	0.04
Garlips	15	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	1.00		
141:					
Nortez, cool	50	Very limited		Very limited	
		Restricted permeability	1.00	Depth to hard bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
Morapos	40	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
142:					
Nortez, cool	50	Very limited		Very limited	
		Restricted permeability	1.00	Depth to hard bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Slope	1.00		
Morapos	40	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	1.00		
143:					
Nunemaker	90	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
				Seepage	0.53
144:					
Pagoda	85	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	1.00		
145:					
Pagoda	85	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
146:					
Pavillion	60	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Restricted permeability	1.00	Slope	1.00
		Slope	0.63		
Degater	25	Very limited		Very limited	
		Restricted permeability	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Slope	0.63		
147:					
Peeler	85	Very limited		Very limited	
		Slope	1.00	Seepage	1.00
		Restricted permeability	0.46	Slope	1.00
				Content of organic matter	1.00
148:					
Pilotpeak	45	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
				Seepage	1.00
				Slope	1.00
Grubrob	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
				Seepage	1.00
				Slope	0.32

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
149:					
Pinelli	85	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
150:					
Pinelli	85	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	0.04		
151:					
Pinelli, dry	85	Very limited		Somewhat limited	
		Restricted permeability	1.00	Slope	0.92
152:					
Pinridge	85	Somewhat limited		Very limited	
		Restricted permeability	0.46	Slope	1.00
				Seepage	0.53
		Flooding	0.40	Flooding	0.40
153:					
Pricecreek	85	Very limited		Not limited	
		Restricted permeability	1.00		
154:					
Quealman	90	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
				Seepage	1.00
155:					
Rencot	50	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Content of large stones	1.00	Content of large stones	1.00
		Slope	0.84	Slope	1.00
				Seepage	0.53
Duffymont	30	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Content of large stones	1.00	Content of large stones	1.00
		Slope	0.84	Slope	1.00
156:					
Rentsac	85	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Content of large stones	0.03		

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
157:					
Rentsac	40	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Content of large stones	0.12	Content of large stones	0.02
Moyerson	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
158:					
Rock outcrop	70	Not rated		Not rated	
Earsman	20	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Content of large stones	1.00	Slope	1.00
		Slope	1.00	Content of large stones	1.00
159:					
Rock outcrop	50	Not rated		Not rated	
Haploborolls	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
				Seepage	1.00
				Content of large stones	0.01
160:					
Rock outcrop	70	Not rated		Not rated	
Torriorthents	25	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Content of large stones	0.79	Seepage	1.00
				Content of large stones	0.96
161:					
Rock River	85	Somewhat limited		Very limited	
		Restricted permeability	0.46	Seepage	1.00
162:					
Rock River	85	Somewhat limited		Very limited	
		Restricted permeability	0.46	Seepage	1.00
				Slope	1.00

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
163:					
Rock River	85	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	0.46	Seepage	1.00
164:					
Rock River	50	Somewhat limited		Very limited	
		Slope	0.63	Seepage	1.00
		Restricted permeability	0.46	Slope	1.00
Taffom	25	Somewhat limited		Very limited	
		Slope	0.63	Seepage	1.00
		Restricted permeability	0.46	Slope	1.00
165:					
Rogrube sandy loam	50	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
Rogrube clay loam	25	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
166:					
Routt	80	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	0.96	Content of organic matter	1.00
				Seepage	0.53
167:					
Routt	30	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	1.00		
Cochetopa	25	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	1.00	Seepage	0.28
Binco	20	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	1.00		
168:					
Ruedloff	85	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	0.68

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
169:					
Ruedloff	60	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Slope	1.00	Slope	1.00
Dunul	30	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Slope	1.00	Slope	1.00
170:					
Ryan Park	85	Somewhat limited		Very limited	
		Slope	0.04	Seepage	1.00
				Slope	1.00
171:					
Ryan Park	85	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
172:					
Ryan Park	50	Very limited		Very limited	
		Slope	1.00	Seepage	1.00
				Slope	1.00
Coyet	30	Very limited		Very limited	
		Slope	1.00	Seepage	1.00
				Slope	1.00
173:					
Ryark	65	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	1.00
		Slope	0.04		
Powderwash	20	Very limited		Very limited	
		Restricted permeability	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00
		Slope	0.04	Slope	1.00
174:					
Ryark	70	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	1.00
Maybell	15	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	1.00
175:					
Sandwash	40	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
				Seepage	0.53
				Slope	0.32

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
175:					
Langspring----------	30	Somewhat limited		Somewhat limited	
		Restricted permeability	0.46	Seepage	0.53
				Slope	0.32
Baston----------	20	Very limited		Very limited	
		Restricted permeability	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	0.32
176:					
Schooner----------	50	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00		
				Seepage	1.00
				Slope	1.00
Rock outcrop--------	35	Not rated		Not rated	
177:					
Schooner----------	55	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00		
				Seepage	1.00
				Slope	1.00
Tricera----------	25	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	1.00
		Slope	0.16		
178:					
Simanni----------	50	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	0.92
Ruedloff----------	40	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	0.92
179:					
Skyway, dry---------	85	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00		
				Slope	1.00
				Seepage	1.00
180:					
Spool----------	55	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00		
				Slope	1.00
Maybell----------	30	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	1.00
		Slope	0.16		

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
181:					
Stunner	90	Not limited		Very limited	
				Seepage	1.00
				Slope	0.68
182:					
Stunner, moist	55	Somewhat limited		Very limited	
		Restricted permeability	0.46	Slope	1.00
				Seepage	0.53
Emlin	35	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
183:					
Styers	45	Very limited		Very limited	
		Restricted permeability	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Slope	1.00		
183:					
Ironsprings	25	Very limited		Very limited	
		Slope	1.00	Slope	1.00
				Seepage	1.00
Maysprings	15	Very limited		Very limited	
		Filtering capacity	1.00	Slope	1.00
				Seepage	1.00
		Slope	1.00		
184:					
Styers	40	Very limited		Very limited	
		Restricted permeability	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Slope	1.00		
Pinelli	20	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	1.00		
Taffom	15	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	0.46	Seepage	1.00
185:					
Taffom	85	Somewhat limited		Very limited	
		Restricted permeability	0.46	Seepage	1.00
				Slope	1.00
		Slope	0.04		
186:					
Talamantes	85	Somewhat limited		Somewhat limited	
		Restricted permeability	0.72	Seepage	0.53
				Slope	0.08

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
187:					
Talamantes----------	90	Somewhat limited		Very limited	
		Restricted permeability	0.72	Slope	1.00
				Seepage	0.53
		Slope	0.37		
188:					
Talamantes, saline----------	85	Very limited		Somewhat limited	
		Restricted permeability	1.00	Seepage	0.53
				Slope	0.32
189:					
Tipper----------	55	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Filtering capacity	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
189:					
Crustown----------	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
190:					
Tipperary----------	90	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	1.00
		Slope	0.84		
191:					
Tipperary----------	90	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	1.00
192:					
Tipperary----------	50	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	1.00
Willwood----------	40	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	1.00
193:					
Tisworth----------	85	Somewhat limited		Somewhat limited	
		Restricted permeability	0.46	Slope	0.68
				Seepage	0.53
194:					
Tolman----------	50	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Content of large stones	1.00	Slope	1.00
		Slope	1.00	Content of large stones	1.00
				Seepage	0.53

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
194:					
Duffymont	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Content of large stones	1.00	Slope	1.00
		Slope	1.00	Content of large stones	1.00
195:					
Torriorthents	95	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Depth to soft bedrock	1.00
		Content of large stones	0.54	Slope	1.00
				Content of large stones	0.25
196:					
Torriorthents	50	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Content of large stones	0.54	Slope	1.00
				Content of large stones	0.25
Baston	35	Very limited		Very limited	
		Restricted permeability	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
197:					
Torriorthents	60	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Depth to soft bedrock	1.00
		Content of large stones	0.66	Slope	1.00
				Seepage	1.00
				Content of large stones	0.96
Rock outcrop, sandstone	30	Not rated		Not rated	
198:					
Torriorthents	60	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
Rock outcrop, shale	40	Not rated		Not rated	

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
199:					
Torriorthents-------	60	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Depth to soft bedrock	1.00
				Slope	1.00
				Seepage	0.28
Torripsamments------	30	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Filtering capacity	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
				Seepage	1.00
200:					
Tresano-------------	80	Somewhat limited		Very limited	
		Restricted permeability	0.46	Slope	1.00
				Seepage	0.53
201:					
Tresano-------------	35	Somewhat limited		Very limited	
		Restricted permeability	0.46	Slope	1.00
				Seepage	0.53
Hiatha--------------	30	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	0.84	Slope	1.00
Kandaly-------------	15	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	1.00
202:					
Turzo---------------	90	Somewhat limited		Somewhat limited	
		Restricted permeability	0.46	Seepage	0.53
				Slope	0.08
203:					
Turzo, saline-------	90	Somewhat limited		Somewhat limited	
		Restricted permeability	0.46	Slope	0.68
				Seepage	0.53
204:					
Typic Natrargids----	80	Very limited		Somewhat limited	
		Restricted permeability	1.00	Slope	0.08
205:					
Uffens--------------	90	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
206:					
Ustorthents, frigid	55	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00		
		Content of large stones	1.00	Depth to soft bedrock	1.00
				Slope	1.00
				Content of large stones	1.00
				Seepage	1.00
Borolls	35	Very limited		Very limited	
		Restricted permeability	1.00	Depth to hard bedrock	1.00
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00		
				Slope	1.00
207:					
Vermillion	40	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	0.96		
		Restricted permeability	0.46	Slope	1.00
				Seepage	0.53
Langspring	35	Somewhat limited		Very limited	
		Slope	0.96	Slope	1.00
		Restricted permeability	0.46	Seepage	0.53
208:					
Wallson	50	Somewhat limited		Very limited	
		Slope	0.04	Seepage	1.00
				Slope	1.00
Tricera	35	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Slope	0.04	Slope	1.00
209:					
Weed	85	Somewhat limited		Very limited	
		Restricted permeability	0.46	Seepage	1.00
				Slope	1.00
210:					
Willwood	55	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Content of large stones	1.00	Content of large stones	1.00
				Slope	1.00
Sheppard, cool	35	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	1.00

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
211:					
Willwood	55	Very limited		Very limited	
		Filtering capacity	1.00	Slope	1.00
				Seepage	1.00
		Slope	1.00	Content of large stones	1.00
		Content of large stones	1.00		
Tipperary	35	Very limited		Very limited	
		Filtering capacity	1.00	Slope	1.00
				Seepage	1.00
		Slope	1.00		
212:					
Willwood	60	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	1.00
		Content of large stones	0.95	Content of large stones	0.94
Tipperary, cobbly substratum	25	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	1.00
Winevada	60	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	0.96		
		Restricted permeability	0.46	Slope	1.00
				Seepage	0.53
Splitro	30	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	0.96		
				Seepage	1.00
				Slope	1.00
				Content of organic matter	1.00
214:					
Winevada	60	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00		
		Restricted permeability	0.46	Slope	1.00
				Content of organic matter	1.00
				Seepage	0.53
Splitro	30	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00		
				Slope	1.00
				Seepage	1.00
				Content of organic matter	1.00

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
215:					
Winkleman	85	Very limited		Very limited	
		Restricted permeability	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Flooding	0.40
		Flooding	0.40		
216:					
Yamo	90	Somewhat limited		Very limited	
		Restricted permeability	0.46	Slope	1.00
		Slope	0.04	Seepage	0.53
217:					
Yamo	90	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	0.46	Seepage	0.53
218:					
Yellowwash	50	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	0.16	Slope	1.00
Piezon	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Restricted permeability	0.46	Slope	1.00
		Slope	0.16	Seepage	0.53
219:					
Youga	90	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
		Slope	0.04	Seepage	0.53
220:					
Youga	50	Somewhat limited		Very limited	
		Restricted permeability	0.46	Seepage	1.00
				Slope	1.00
Dinnen	40	Not limited		Very limited	
				Seepage	1.00
				Slope	1.00
221:					
Youga	40	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	0.46	Seepage	1.00
Gelkie	30	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	0.46	Seepage	1.00

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
221:					
Clayburn, warm------	20	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	0.46	Seepage	1.00
				Content of organic matter	1.00
222:					
Youngston, cool-----	90	Somewhat limited		Somewhat limited	
		Restricted permeability	0.46	Seepage	0.53
				Flooding	0.40
		Depth to saturated zone	0.40		
		Flooding	0.40		
223:					
Youngston, well drained----------	90	Very limited		Somewhat limited	
		Restricted permeability	1.00	Flooding	0.40
		Flooding	0.40		
224:					
Zillion----------	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	0.46	Seepage	0.53
		Content of large stones	0.35		
Barkelew, moist-----	25	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	1.00	Content of large stones	1.00
		Content of large stones	0.54	Seepage	0.53
Grapit----------	20	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	0.46	Seepage	0.53
				Content of large stones	0.01
225:					
Abracon----------	45	Somewhat limited		Somewhat limited	
		Restricted permeability	0.46	Slope	0.92
				Seepage	0.53
Solirec----------	40	Somewhat limited		Somewhat limited	
		Restricted permeability	0.46	Slope	0.92
				Seepage	0.53
226:					
Arches----------	45	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
226:					
Mespun	20	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Slope	1.00	Slope	1.00
Rock outcrop	20	Not rated		Not rated	
227:					
Bankard family	55	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Flooding	0.40	Flooding	0.40
				Slope	0.08
Cameo	35	Somewhat limited		Very limited	
		Flooding	0.40	Seepage	1.00
				Flooding	0.40
				Slope	0.08
228:					
Bondman	50	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
228:					
Rock outcrop	35	Not rated		Not rated	
229:					
Cameo	85	Somewhat limited		Very limited	
		Flooding	0.40	Seepage	1.00
				Flooding	0.40
				Slope	0.08
230:					
Cragnot	35	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	0.72	Content of large stones	0.84
		Content of large stones	0.19	Seepage	0.28
Pensore	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Content of large stones	0.96	Seepage	1.00
				Content of large stones	1.00
Grapit	15	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	0.46	Seepage	1.00
		Content of large stones	0.33	Content of large stones	0.03

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
231:					
Green River	70	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	0.40	Seepage	1.00
				Flooding	0.40
Fluvaquents	15	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Ponding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Filtering capacity	1.00	Seepage	1.00
232:					
Lakebench	50	Very limited		Very limited	
		Slope	1.00	Seepage	1.00
				Slope	1.00
Strell	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Seepage	1.00
				Slope	1.00
233:					
Lakebench	50	Very limited		Very limited	
		Slope	1.00	Seepage	1.00
				Slope	1.00
Yampa	35	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Slope	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00
		Restricted permeability	0.72		
234:					
Mantlemine	85	Somewhat limited		Somewhat limited	
		Restricted permeability	0.72	Slope	0.68
				Seepage	0.53
235:					
Mantlemine	55	Somewhat limited		Very limited	
		Restricted permeability	0.72	Slope	1.00
				Seepage	0.53
Emlin	30	Very limited		Very limited	
		Restricted permeability	1.00	Slope	1.00
236:					
Mido	85	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
				Slope	1.00

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
237:					
Mikim loam----------	55	Somewhat limited		Somewhat limited	
		Restricted permeability	0.46	Seepage	0.53
Mikim silt loam-----	35	Somewhat limited		Somewhat limited	
		Restricted permeability	0.72	Seepage	0.28
				Slope	0.08
238:					
Milok---------------	85	Not limited		Very limited	
				Seepage	1.00
				Slope	0.92
239:					
Milok---------------	45	Very limited		Very limited	
		Slope	1.00	Slope	1.00
				Seepage	1.00
Solirec-------------	25	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	0.72	Seepage	1.00
239:					
Strych--------------	15	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Filtering capacity	1.00	Seepage	1.00
		Content of large stones	1.00	Content of large stones	1.00
240:					
Milok---------------	70	Very limited		Very limited	
		Slope	1.00	Slope	1.00
				Seepage	1.00
Strych--------------	20	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Slope	0.96	Content of large stones	1.00
		Content of large stones	0.93	Slope	1.00
241:					
Pensore-------------	60	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Content of large stones	0.96	Seepage	1.00
				Content of large stones	1.00
Roto----------------	25	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Content of large stones	0.08	Seepage	1.00
				Content of large stones	0.76

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
242:					
Riverwash	85	Not rated		Not rated	
243:					
Rizno	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	0.96	Seepage	1.00
		Content of large stones	0.32	Slope	1.00
				Content of large stones	0.53
Windcomb	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	0.96	Slope	1.00
				Seepage	0.53
Anasazi	15	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Filtering capacity	1.00	Seepage	1.00
		Slope	0.96	Slope	1.00
				Content of large stones	0.01
244:					
Rock outcrop	60	Not rated		Not rated	
Hackling	30	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Content of large stones	1.00	Seepage	1.00
				Content of large stones	1.00
245:					
Rock outcrop	30	Not rated		Not rated	
Torriorthents	30	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Content of large stones	0.01	Seepage	1.00
				Content of large stones	0.14
Ustorthents	30	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Restricted permeability	0.72	Content of large stones	0.96
		Content of large stones	0.20	Seepage	0.28

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
246:					
Schoonover	55	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	0.96	Slope	1.00
Duffymont	30	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Content of large stones	1.00	Content of large stones	1.00
		Slope	0.96	Seepage	1.00
				Slope	1.00
247:					
Stout	60	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
Rock outcrop	30	Not rated		Not rated	
248:					
Strych	50	Very limited		Very limited	
		Filtering capacity	1.00	Slope	1.00
		Slope	1.00	Seepage	1.00
		Content of large stones	1.00	Content of large stones	1.00
Mellenthin	35	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Content of large stones	1.00	Slope	1.00
		Slope	1.00	Content of large stones	1.00
249:					
Zillion	40	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Content of large stones	0.72	Seepage	0.53
		Restricted permeability	0.46	Content of large stones	0.01
Yampa	25	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Filtering capacity	1.00	Seepage	1.00
		Content of large stones	1.00	Content of large stones	1.00
		Restricted permeability	0.72		
Clyl	20	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	0.46	Seepage	0.53
		Content of large stones	0.03		

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
250:					
Abracon	85	Somewhat limited		Somewhat limited	
		Restricted permeability	0.46	Slope	0.92
				Seepage	0.53
251:					
Badland	60	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
Renegade	25	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Content of large stones	1.00	Seepage	1.00
		Depth to bedrock	0.36	Content of large stones	1.00
				Depth to soft bedrock	0.01
252:					
Bigtom	50	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted permeability	1.00	Content of large stones	1.00
		Content of large stones	1.00	Content of organic matter	1.00
Namlot	20	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Content of large stones	0.97	Content of large stones	1.00
				Seepage	0.53
Dokie	15	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00
		Restricted permeability	0.46	Seepage	1.00
				Content of organic matter	1.00
253:					
Clapper	85	Somewhat limited		Very limited	
		Slope	0.96	Seepage	1.00
				Slope	1.00
254:					
Cliff	85	Not limited		Very limited	
				Seepage	1.00
				Slope	0.08
255:					
Clyl	45	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Content of large stones	0.70	Seepage	0.53
		Restricted permeability	0.46		

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
255:					
Pinerid	40	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
				Seepage	0.53
256:					
Cortyzack	65	Somewhat limited		Very limited	
		Slope	0.96	Slope	1.00
		Restricted permeability	0.46	Seepage	0.53
Diagulch	20	Very limited		Very limited	
		Filtering capacity	1.00	Seepage	1.00
		Restricted permeability	0.46	Slope	1.00
		Slope	0.04		
257:					
Cortyzack	55	Somewhat limited		Very limited	
		Slope	0.96	Slope	1.00
		Restricted permeability	0.46	Seepage	0.53
Duffymont	30	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Content of large stones	1.00	Content of large stones	1.00
		Slope	0.96	Seepage	1.00
				Slope	1.00
258:					
Cortyzack	45	Somewhat limited		Very limited	
		Slope	0.96	Slope	1.00
		Restricted permeability	0.46	Seepage	0.53
Flynncove	45	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Content of large stones	0.93	Seepage	1.00
		Restricted permeability	0.46	Content of large stones	0.96
259:					
Denco	45	Very limited		Very limited	
		Restricted permeability	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Slope	1.00		
Gerst	40	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
260:					
Dokie	70	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00
		Restricted permeability	0.46	Seepage	1.00
				Content of organic matter	1.00
Flynncove	15	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00
		Restricted permeability	0.46	Seepage	1.00
261:					
Dokie	50	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Content of large stones	1.00	Content of large stones	1.00
		Restricted permeability	0.46	Seepage	1.00
				Content of organic matter	1.00
Namlot	40	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00		
		Content of large stones	0.97	Slope	1.00
				Content of large stones	1.00
				Seepage	0.53
262:					
Gompers	85	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00		
				Seepage	1.00
				Slope	1.00
263:					
Hanksville	85	Very limited		Very limited	
		Restricted permeability	1.00	Depth to soft bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00
		Slope	0.96		
264:					
Mikim	85	Somewhat limited		Very limited	
		Restricted permeability	0.46	Slope	1.00
		Slope	0.04	Seepage	0.53
265:					
Mikim	85	Somewhat limited		Somewhat limited	
		Restricted permeability	0.72	Seepage	0.28
				Slope	0.08

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
266:					
Rock outcrop--------	40	Not rated		Not rated	
Boxring----------	25	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Content of large stones	1.00	Slope	1.00
		Slope	1.00	Content of large stones	1.00
				Seepage	0.53
Tridell----------	25	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Content of large stones	0.87	Content of large stones	1.00
		Restricted permeability	0.46	Seepage	0.53
267:					
Solirec----------	35	Somewhat limited		Somewhat limited	
		Restricted permeability	0.46	Slope	0.92
				Seepage	0.53
Abracon----------	30	Somewhat limited		Somewhat limited	
		Restricted permeability	0.46	Slope	0.92
				Seepage	0.53
Begay----------	20	Somewhat limited		Very limited	
		Slope	0.04	Seepage	1.00
				Slope	1.00
268:					
Toliver----------	55	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Content of large stones	1.00	Seepage	1.00
		Depth to bedrock	0.30	Content of large stones	1.00
Rock outcrop--------	30	Not rated		Not rated	
269:					
Walknolls----------	60	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
				Seepage	1.00
Badland----------	15	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
Rock outcrop--------	10	Not rated		Not rated	
270:					
Walknolls----------	55	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Seepage	1.00
				Slope	1.00

Table 13.--Sanitary facilities--Septic tank absorption fields and sewage lagoons--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
270:					
Gilston	35	Not limited		Very limited	
				Seepage	1.00
				Slope	0.68
271:					
Water	95	Not rated		Not rated	

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1:							
Abor	85	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Too clayey	1.00	Slope	1.00	Too clayey	1.00
		Slope	1.00			Hard to compact	1.00
						Slope	1.00
2:							
Abor	80	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Too clayey	1.00			Too clayey	1.00
						Hard to compact	1.00
3:							
Adderton	90	Somewhat limited		Somewhat limited		Not limited	
		Flooding	0.40	Flooding	0.40		
4:							
Almy	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.04	Slope	0.04	Slope	0.04
5:							
Apmay	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too sandy	1.00
		Seepage	1.00	Seepage	1.00	Seepage	1.00
		Too sandy	1.00	Flooding	0.40	Depth to saturated zone	0.68
		Flooding	0.40				
6:							
Avalon	45	Not limited		Not limited		Not limited	
Mack	45	Not limited		Not limited		Not limited	
7:							
Avalon	30	Very limited		Not limited		Somewhat limited	
		Depth to bedrock	1.00			Depth to bedrock	0.93
Persayo, moist	25	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Slope	1.00			Slope	1.00
Degater	20	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Slope	1.00			Hard to compact	1.00
						Slope	1.00
8:							
Badland	90	Not rated		Not rated		Not rated	
9:							
Baroid	55	Very limited		Somewhat limited		Very limited	
		Too sandy	1.00	Flooding	0.40	Too sandy	1.00
		Flooding	0.40			Seepage	1.00

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
9:							
Eghelm	35	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Seepage	0.52
		Flooding	0.40	Flooding	0.40		
10:							
Battlement	85	Somewhat limited		Somewhat limited		Not limited	
		Flooding	0.40	Flooding	0.40		
11:							
Battlement, saline--	80	Very limited		Very limited		Not limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00		
		Flooding	0.40	Flooding	0.40		
12:							
Berlake	85	Very limited		Not limited		Very limited	
		Too sandy	1.00			Seepage	1.00
						Too sandy	0.50
13:							
Berlake	85	Very limited		Very limited		Very limited	
		Too sandy	1.00	Slope	1.00	Seepage	1.00
		Slope	1.00			Slope	1.00
						Too sandy	0.50
14:							
Berlake	55	Very limited		Not limited		Very limited	
		Too sandy	1.00			Seepage	1.00
						Too sandy	0.50
Maysprings	30	Very limited		Not limited		Very limited	
		Too sandy	1.00			Too sandy	1.00
						Seepage	1.00
15:							
Berlake	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Taffom	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Gretdivid	15	Very limited		Very limited		Very limited	
		Too sandy	1.00	Slope	1.00	Too sandy	1.00
		Slope	1.00			Seepage	1.00
						Slope	1.00
						Gravel content	0.01
16:							
Bilhil	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Hard to compact	1.00
17:							
Binco	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	1.00			Too clayey	1.00
						Hard to compact	1.00

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
18:							
Boltus	50	Very limited		Not limited		Very limited	
		Depth to bedrock	1.00			Depth to bedrock	1.00
						Hard to compact	1.00
Beamton	25	Very limited		Not limited		Very limited	
		Depth to bedrock	1.00			Depth to bedrock	1.00
19:							
Borollic Natrargids	40	Not limited		Not limited		Not limited	
Borollic Haplargids	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63	Slope	0.63
Ustic Torrifluvents	25	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too sandy	0.50
		Too sandy	1.00	Flooding	0.40		
		Flooding	0.40				
20:							
Brownsto	50	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.96	Slope	0.96	Slope	0.96
		Content of large stones	0.01			Gravel content	0.05
						Content of large stones	0.01
Castee	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.96	Slope	0.96	Slope	0.96
21:							
Bulkley	80	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
22:							
Bulkley	80	Very limited		Not limited		Very limited	
		Too clayey	1.00			Too clayey	1.00
						Hard to compact	1.00
23:							
Bulkley	90	Very limited		Very limited		Very limited	
		Too clayey	1.00	Slope	1.00	Too clayey	1.00
		Slope	1.00			Hard to compact	1.00
						Slope	1.00
24:							
Bulkley	60	Very limited		Very limited		Very limited	
		Too clayey	1.00	Slope	1.00	Too clayey	1.00
		Slope	1.00			Hard to compact	1.00
						Slope	1.00
Quilt	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
						Gravel content	0.07

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
25:							
Campspass	90	Not limited		Not limited		Not limited	
26:							
Campspass	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
27:							
Canlodore	95	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00	Seepage	1.00
		Too sandy	1.00			Too sandy	0.50
		Content of large stones	0.48			Content of large stones	0.48
						Gravel content	0.05
28:							
Carbol	40	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
Irigul	25	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	0.96	Slope	0.96	Slope	0.96
						Gravel content	0.63
Rock outcrop	25	Not rated		Not rated		Not rated	
29:							
Carbol	45	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
Miracle	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
30:							
Carmody	35	Very limited		Somewhat limited		Very limited	
		Depth to bedrock	1.00	Slope	0.37	Depth to bedrock	1.00
		Slope	0.37			Seepage	0.52
						Slope	0.37
Rock River	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.37	Slope	0.37	Seepage	0.52
						Slope	0.37
Crestman	20	Very limited		Somewhat limited		Very limited	
		Depth to bedrock	1.00	Slope	0.37	Depth to bedrock	1.00
		Too sandy	1.00			Seepage	1.00
		Slope	0.37			Too sandy	0.50
						Slope	0.37
						Gravel content	0.03
31:							
Castee	90	Not limited		Not limited		Not limited	
32:							
Chroder	80	Not limited		Not limited		Somewhat limited	
						Seepage	0.52

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
33:							
Clayburn, warm------	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.96	Slope	0.96	Slope	0.96
		Too clayey	0.50			Too clayey	0.50
34:							
Clayburn----------	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00	Seepage	0.52
Foidel----------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
35:							
Clayburn----------	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
Youga, moist--------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
36:							
Clifsand----------	60	Somewhat limited		Not limited		Somewhat limited	
		Content of large stones	0.90			Content of large stones	0.90
						Seepage	0.52
Chroder----------	30	Not limited		Not limited		Somewhat limited	
						Seepage	0.52
37:							
Cochetopa----------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Hard to compact	1.00
		Too clayey	0.50			Slope	1.00
						Too clayey	0.50
38:							
Cochetopa----------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Hard to compact	1.00
						Too clayey	0.50
39:							
Cochetopa, warm-----	85	Somewhat limited		Not limited		Very limited	
		Too clayey	0.50			Hard to compact	1.00
						Too clayey	0.50
40:							
Cochetopa----------	45	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.84	Slope	0.84	Hard to compact	1.00
		Too clayey	0.50			Slope	0.84
						Too clayey	0.50
Gothic----------	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	1.00			Too clayey	1.00
						Hard to compact	1.00

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
41:							
Cochetopa	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	1.00			Too clayey	1.00
						Hard to compact	1.00
Gothic	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	1.00			Too clayey	1.00
						Hard to compact	1.00
42:							
Cochetopa	50	Somewhat limited		Somewhat limited		Very limited	
		Too clayey	0.50	Slope	0.04	Hard to compact	1.00
		Slope	0.04			Too clayey	0.50
						Slope	0.04
Jerry	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Too clayey	0.50	Slope	0.04	Too clayey	0.50
		Slope	0.04			Slope	0.04
43:							
Coldspring, moist	80	Very limited		Somewhat limited		Somewhat limited	
		Depth to bedrock	1.00	Depth to bedrock	0.71	Depth to bedrock	0.71
		Too clayey	0.50			Too clayey	0.50
44:							
Cowestglen	80	Very limited		Somewhat limited		Very limited	
		Too sandy	1.00	Flooding	0.40	Too sandy	1.00
		Flooding	0.40			Seepage	0.52
45:							
Coyet	90	Very limited		Not limited		Somewhat limited	
		Too sandy	1.00			Seepage	0.52
						Too sandy	0.50
46:							
Coyet	85	Very limited		Very limited		Very limited	
		Too sandy	1.00	Slope	1.00	Slope	1.00
		Slope	1.00			Seepage	0.52
						Too sandy	0.50
47:							
Coyet	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00			Too sandy	1.00
		Too sandy	1.00			Depth to bedrock	0.61
						Seepage	0.52
Crestman, moist	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00			Slope	1.00
		Too sandy	1.00			Seepage	1.00
						Too sandy	0.50
						Gravel content	0.03
48:							
Crago	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Carbonate content	1.00
						Gravel content	0.98

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
48:							
Pensore	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Slope	1.00			Slope	1.00
						Carbonate content	1.00
						Gravel content	0.82
Grapit	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.02			Carbonate content	1.00
						Gravel content	0.88
						Content of large stones	0.02
49:							
Cryoborolls, slumped	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	1.00			Too clayey	1.00
50:							
Cushool	85	Very limited		Not limited		Very limited	
		Depth to bedrock	1.00			Depth to bedrock	1.00
51:							
Cushool	85	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Slope	1.00			Slope	1.00
52:							
Danavore	45	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.34			Gravel content	0.37
						Content of large stones	0.34
Waybe	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
53:							
Davtone	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Forsey	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Content of large stones	1.00
		Content of large stones	1.00	Slope	1.00	Slope	1.00
		Slope	1.00			Seepage	0.52
54:							
Deaver	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00			Slope	1.00
Avalon	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.04	Slope	0.04	Slope	0.04

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
55:							
Deaver	60	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Slope	1.00			Slope	1.00
Chipeta	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Slope	1.00			Slope	1.00
56:							
Debone	90	Not limited		Not limited		Not limited	
57:							
Detra	50	Not limited		Not limited		Not limited	
Cortyzack	40	Not limited		Not limited		Not limited	
58:							
Diaflats	45	Very limited		Somewhat limited		Very limited	
		Depth to bedrock	1.00	Slope	0.04	Depth to bedrock	1.00
		Slope	0.04			Slope	0.04
Fondillas	35	Very limited		Somewhat limited		Very limited	
		Depth to bedrock	1.00	Slope	0.04	Depth to bedrock	1.00
		Content of large stones	0.24			Content of large stones	0.24
		Slope	0.04			Slope	0.04
59:							
Dranyon	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63	Slope	0.63
						Gravel content	0.05
60:							
Dumps, mine	100	Not rated		Not rated		Not rated	
61:							
Ecklund	50	Very limited		Not limited		Very limited	
		Depth to bedrock	1.00			Depth to bedrock	1.00
		Too sandy	1.00			Seepage	0.52
						Too sandy	0.50
Tipperary	40	Very limited		Not limited		Very limited	
		Too sandy	1.00			Seepage	1.00
						Too sandy	0.50
62:							
Eghelm	90	Very limited		Somewhat limited		Somewhat limited	
		Too sandy	1.00	Flooding	0.40	Seepage	0.52
		Flooding	0.40			Too sandy	0.50
63:							
Eghelm, moist	90	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Seepage	0.52
		Too sandy	1.00	Flooding	0.40	Too sandy	0.50
		Flooding	0.40				
64:							
Emlin	85	Not limited		Not limited		Not limited	

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Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
65:							
Emlin	65	Not limited		Not limited		Not limited	
Tymosling	20	Very limited		Somewhat limited		Very limited	
		Depth to bedrock	1.00	Slope	0.16	Depth to bedrock	1.00
		Slope	0.16			Hard to compact	1.00
						Slope	0.16
66:							
Evanot	90	Not limited		Not limited		Not limited	
67:							
Evanot	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
68:							
Evanot	50	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63	Slope	0.63
Yamo	25	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63	Slope	0.63
69:							
Fenster	45	Not limited		Not limited		Not limited	
Thenipel	30	Not limited		Not limited		Not limited	
70:							
Fluvaquents, frequently flooded	50	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too sandy	1.00
		Too sandy	1.00	Seepage	1.00	Seepage	1.00
		Seepage	1.00			Gravel content	0.01
Haplaquolls, frequently flooded	45	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too sandy	1.00
		Seepage	1.00	Seepage	1.00	Seepage	1.00
		Too sandy	1.00				
71:							
Flygare, dry	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.69			Content of large stones	0.69
		Too clayey	0.50			Too clayey	0.50
72:							
Foidel, cool	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.96	Slope	0.96	Slope	0.96
		Too clayey	0.50			Too clayey	0.50

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
73:							
Foidel	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
74:							
Foidel, moist	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.96	Slope	0.96	Slope	0.96
		Too clayey	0.50			Too clayey	0.50
Flygare	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.96	Slope	0.96	Slope	0.96
		Content of large stones	0.69			Content of large stones	0.69
		Too clayey	0.50			Too clayey	0.50
Skyway, moist	20	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Seepage	1.00	Depth to bedrock	1.00	Slope	0.96
		Slope	0.96	Slope	0.96	Seepage	0.52
75:							
Fonce	90	Very limited		Not limited		Very limited	
		Too sandy	1.00			Too sandy	1.00
						Seepage	1.00
						Gravel content	0.18
76:							
Fonce	90	Not limited		Not limited		Very limited	
						Seepage	1.00
						Gravel content	0.71
77:							
Forelle	85	Not limited		Not limited		Not limited	
78:							
Forelle	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
79:							
Forelle	50	Not limited		Not limited		Not limited	
Evanot	40	Not limited		Not limited		Not limited	
80:							
Forelle	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Evanot	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
81:							
Forelle	40	Not limited		Not limited		Not limited	
Obadia	35	Not limited		Not limited		Not limited	
82:							
Forelle	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.84	Slope	0.84	Slope	0.84

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
82:							
Pinelli	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.84	Slope	0.84	Slope	0.84
Maysprings	15	Very limited		Somewhat limited		Very limited	
		Too sandy	1.00	Slope	0.84	Too sandy	1.00
		Slope	0.84			Seepage	1.00
						Slope	0.84
83:							
Forsey	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Content of large stones	1.00
		Content of large stones	1.00	Slope	0.96	Slope	0.96
		Slope	0.96			Seepage	0.52
Libeg	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Content of large stones	0.38	Slope	0.04	Content of large stones	0.38
		Slope	0.04			Gravel content	0.12
						Slope	0.04
84:							
Gebson, moist	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Youga	35	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Seepage	1.00	Seepage	0.52
		Slope	0.16	Slope	0.16	Slope	0.16
85:							
Giarch	90	Very limited		Very limited		Not limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00		
		Salinity	1.00	Flooding	0.40		
		Flooding	0.40				
86:							
Gracot	50	Very limited		Very limited		Very limited	
		Too sandy	1.00	Slope	1.00	Too sandy	1.00
		Slope	1.00			Seepage	1.00
						Slope	1.00
Maybell	30	Very limited		Very limited		Very limited	
		Too sandy	1.00	Slope	1.00	Too sandy	1.00
		Slope	1.00			Seepage	1.00
						Slope	1.00
87:							
Gretdivid	35	Very limited		Very limited		Very limited	
		Too sandy	1.00	Slope	1.00	Too sandy	1.00
		Slope	1.00			Seepage	1.00
						Slope	1.00
						Gravel content	0.01
Taffom	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
87:							
Abor	15	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Too clayey	1.00	Slope	1.00	Too clayey	1.00
		Slope	1.00			Hard to compact	1.00
						Slope	1.00
88:							
Grieves	85	Not limited		Not limited		Somewhat limited	
						Seepage	0.52
89:							
Grieves	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Seepage	0.52
90:							
Grieves	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Seepage	0.52
Crestman	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00			Slope	1.00
		Too sandy	1.00			Seepage	1.00
						Too sandy	0.50
						Gravel content	0.01
91:							
Grieves	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Seepage	0.52
Yamo	25	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.04	Slope	0.04	Slope	0.04
Crestman	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00			Slope	1.00
		Too sandy	1.00			Seepage	1.00
						Too sandy	0.50
						Gravel content	0.03
92:							
Grimm	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too sandy	1.00			Too sandy	1.00
		Content of large stones	0.97			Seepage	1.00
						Content of large stones	0.97
Ustic Torriorthents, shallow	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00			Slope	1.00
93:							
Gullied land	85	Not rated		Not rated		Not rated	

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
94:							
Hapney, moist-------	90	Very limited		Very limited		Not limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00		
95:							
Haterton------------	60	Very limited		Not limited		Very limited	
		Depth to bedrock	1.00			Depth to bedrock	1.00
						Gravel content	0.08
Piezon--------------	30	Very limited		Not limited		Very limited	
		Depth to bedrock	1.00			Depth to bedrock	1.00
96:							
Heathcoat-----------	85	Not limited		Not limited		Not limited	
97:							
Heathcoat-----------	60	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.84	Slope	0.84	Slope	0.84
		Too clayey	0.50			Too clayey	0.50
Clayburn------------	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
98:							
Herm-----------------	50	Very limited		Very limited		Very limited	
		Too clayey	1.00	Slope	1.00	Too clayey	1.00
		Slope	1.00			Hard to compact	1.00
						Slope	1.00
Fughes--------------	35	Very limited		Very limited		Very limited	
		Too clayey	1.00	Slope	1.00	Too clayey	1.00
		Slope	1.00			Hard to compact	1.00
						Slope	1.00
99:							
Hesperus, dry-------	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Too clayey	0.50	Slope	0.04	Too clayey	0.50
		Slope	0.04			Slope	0.04
100:							
Hesperus------------	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
101:							
Hesperus------------	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.96	Slope	0.96	Slope	0.96
		Too clayey	0.50			Too clayey	0.50
102:							
Holter--------------	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.95			Content of large stones	0.95
						Gravel content	0.01
Detra---------------	30	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Seepage	1.00	Seepage	0.52

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
103:							
Iles	85	Not limited		Not limited		Not limited	
104:							
Ironco	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00			Content of large stones	1.00
		Too clayey	0.50			Too clayey	0.50
Mulgon, dry	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00			Content of large stones	1.00
105:							
Ironsprings	85	Not limited		Not limited		Somewhat limited	
						Seepage	0.52
106:							
Ironsprings	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Seepage	0.52
107:							
Ironsprings	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Seepage	0.52
Maysprings	25	Very limited		Very limited		Very limited	
		Too sandy	1.00	Slope	1.00	Too sandy	1.00
		Slope	1.00			Seepage	1.00
						Slope	1.00
Gretdivid	15	Very limited		Very limited		Very limited	
		Too sandy	1.00	Slope	1.00	Too sandy	1.00
		Slope	1.00			Seepage	1.00
						Slope	1.00
						Gravel content	0.01
108:							
Jerry	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
Cochetopa	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Hard to compact	1.00
		Too clayey	0.50			Slope	1.00
						Too clayey	0.50
109:							
Joebas	60	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Slope	1.00			Slope	1.00
						Gravel content	0.02
Rock outcrop	30	Not rated		Not rated		Not rated	

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
110:							
Kemmerer	80	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Slope	1.00			Slope	1.00
111:							
Kemmerer	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00			Slope	1.00
Grapit	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.05			Carbonate content	1.00
						Gravel content	0.88
						Content of large stones	0.05
112:							
Kemmerer	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00			Slope	1.00
Moyerson	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00			Slope	1.00
						Hard to compact	1.00
113:							
Kemmerer	60	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Slope	1.00			Slope	1.00
Yamo	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
114:							
Lamphier	85	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.96	Seepage	1.00	Slope	0.96
				Slope	0.96		
115:							
Lamphier	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Seepage	1.00		
116:							
Lamphier	45	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.96	Seepage	1.00	Slope	0.96
				Slope	0.96		
Jerry	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.96	Slope	0.96	Slope	0.96
		Too clayey	0.50			Too clayey	0.50
117:							
Lamphier	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
				Seepage	1.00		

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
117:							
Jerry	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
118:							
Lander	85	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.09
		Seepage	1.00	Flooding	0.40		
		Flooding	0.40				
119:							
Langspring	85	Not limited		Not limited		Not limited	
120:							
Layoint	35	Very limited		Not limited		Very limited	
		Depth to bedrock	1.00			Depth to bedrock	1.00
		Too sandy	1.00			Seepage	0.52
						Too sandy	0.50
Moosed	25	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage	1.00	Slope	0.37	Seepage	1.00
		Too sandy	1.00			Too sandy	0.50
		Slope	0.37			Slope	0.37
Berlake	20	Not limited		Not limited		Not limited	
121:							
Leaps	90	Very limited		Somewhat limited		Very limited	
		Too clayey	1.00	Slope	0.04	Too clayey	1.00
		Slope	0.04			Hard to compact	1.00
						Slope	0.04
122:							
Leswill	50	Not limited		Not limited		Not limited	
Rogrube	30	Not limited		Not limited		Not limited	
123:							
Lilsnake	45	Very limited		Somewhat limited		Very limited	
		Depth to bedrock	1.00	Slope	0.63	Depth to bedrock	1.00
		Slope	0.63			Slope	0.63
Sandwash	30	Very limited		Not limited		Very limited	
		Depth to bedrock	1.00			Depth to bedrock	1.00
		Content of large stones	0.75			Carbonate content	1.00
						Content of large stones	0.75
124:							
Losee	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage	1.00			Content of large stones	0.84
		Content of large stones	0.84			Seepage	0.52

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
124:							
Thornburgh, dry-----	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00	Content of large stones	1.00
		Content of large stones	1.00			Seepage	0.52
125:							
Massadona-----------	85	Not limited		Not limited		Very limited	
						Hard to compact	1.00
126:							
Massadona-----------	65	Not limited		Not limited		Very limited	
						Hard to compact	1.00
Youngston, moist----	20	Somewhat limited		Somewhat limited		Not limited	
		Flooding	0.40	Flooding	0.40		
127:							
Maudlin-------------	50	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	0.04	Slope	0.04	Slope	0.04
Duffymont-----------	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage	1.00	Slope	0.04	Content of large stones	1.00
		Content of large stones	1.00			Seepage	0.52
		Slope	0.04			Slope	0.04
128:							
Maybell-------------	90	Very limited		Not limited		Very limited	
		Too sandy	1.00			Too sandy	1.00
						Seepage	1.00
129:							
Maybell-------------	90	Very limited		Very limited		Very limited	
		Too sandy	1.00	Slope	1.00	Too sandy	1.00
		Slope	1.00			Seepage	1.00
						Slope	1.00
130:							
Maysprings----------	85	Very limited		Not limited		Very limited	
		Too sandy	1.00			Too sandy	1.00
						Seepage	1.00
131:							
Maysprings----------	50	Very limited		Very limited		Very limited	
		Too sandy	1.00	Slope	1.00	Too sandy	1.00
		Slope	1.00			Seepage	1.00
						Slope	1.00
Gretdivid-----------	30	Very limited		Very limited		Very limited	
		Too sandy	1.00	Slope	1.00	Too sandy	1.00
		Slope	1.00			Seepage	1.00
						Slope	1.00
						Gravel content	0.01
132:							
Milren--------------	80	Not limited		Not limited		Not limited	

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
133:							
Miracle	50	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
Coldspring	30	Very limited		Somewhat limited		Somewhat limited	
		Depth to bedrock	1.00	Depth to bedrock	0.71	Depth to bedrock	0.71
		Too clayey	0.50			Too clayey	0.50
134:							
Morapos	85	Somewhat limited		Not limited		Somewhat limited	
		Too clayey	0.50			Too clayey	0.50
135:							
Morapos	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
136:							
Morapos	40	Somewhat limited		Not limited		Somewhat limited	
		Too clayey	0.50			Too clayey	0.50
Pagoda	40	Somewhat limited		Not limited		Somewhat limited	
		Too clayey	0.50			Too clayey	0.50
137:							
Morset	50	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Seepage	1.00	Seepage	0.52
Youga	30	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Seepage	1.00	Seepage	0.52
138:							
Moyerson	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00			Slope	1.00
						Hard to compact	1.00
Rentsac	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00			Slope	1.00
		Content of large stones	0.08			Gravel content	0.53
						Seepage	0.52
						Content of large stones	0.08
139:							
Muggins	85	Very limited		Somewhat limited		Very limited	
		Too clayey	1.00	Slope	0.63	Too clayey	1.00
		Slope	0.63			Slope	0.63
140:							
Ninot	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Gravel content	0.28
Crago	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.03			Gravel content	0.99
						Content of large stones	0.03

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
140:							
Garlips	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
141:							
Nortez, cool	50	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Too clayey	0.50			Hard to compact	1.00
						Too clayey	0.50
Morapos	40	Somewhat limited		Not limited		Somewhat limited	
		Too clayey	0.50			Too clayey	0.50
142:							
Nortez, cool	50	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Hard to compact	1.00
		Too clayey	0.50			Slope	1.00
						Too clayey	0.50
Morapos	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
143:							
Nunemaker	90	Not limited		Not limited		Very limited	
						Hard to compact	1.00
144:							
Pagoda	85	Very limited		Very limited		Very limited	
		Too clayey	1.00	Slope	1.00	Too clayey	1.00
		Slope	1.00			Slope	1.00
145:							
Pagoda	85	Very limited		Not limited		Very limited	
		Too clayey	1.00			Too clayey	1.00
146:							
Pavillion	60	Very limited		Somewhat limited		Very limited	
		Depth to bedrock	1.00	Slope	0.63	Depth to bedrock	1.00
		Slope	0.63			Slope	0.63
Degater	25	Very limited		Somewhat limited		Very limited	
		Depth to bedrock	1.00	Slope	0.63	Depth to bedrock	1.00
		Slope	0.63			Hard to compact	1.00
						Slope	0.63
147:							
Peeler	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
148:							
Pilotpeak	45	Very limited		Not limited		Very limited	
		Depth to bedrock	1.00			Depth to bedrock	1.00
						Gravel content	1.00
						Seepage	0.52
Grubrob	35	Very limited		Not limited		Very limited	
		Depth to bedrock	1.00			Depth to bedrock	1.00
						Seepage	0.52

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
149:							
Pinelli	85	Not limited		Not limited		Not limited	
150:							
Pinelli	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.04	Slope	0.04	Slope	0.04
151:							
Pinelli, dry	85	Not limited		Not limited		Not limited	
152:							
Pinridge	85	Somewhat limited		Somewhat limited		Not limited	
		Flooding	0.40	Flooding	0.40		
153:							
Pricecreek	85	Not limited		Not limited		Not limited	
154:							
Quealman	90	Very limited		Very limited		Somewhat limited	
		Flooding	1.00	Flooding	1.00	Seepage	0.52
		Too sandy	1.00			Too sandy	0.50
155:							
Rencot	50	Very limited		Somewhat limited		Very limited	
		Depth to bedrock	1.00	Slope	0.84	Depth to bedrock	1.00
		Content of large stones	1.00			Content of large stones	1.00
		Slope	0.84			Slope	0.84
Duffymont	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage	1.00	Slope	0.84	Content of large stones	1.00
		Content of large stones	1.00			Slope	0.84
		Slope	0.84			Seepage	0.52
156:							
Rentsac	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00			Slope	1.00
		Content of large stones	0.03			Seepage	0.52
						Gravel content	0.42
						Content of large stones	0.03
157:							
Rentsac	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00			Slope	1.00
		Content of large stones	0.12			Gravel content	0.76
						Seepage	0.52
						Content of large stones	0.12
Moyerson	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00			Slope	1.00
						Hard to compact	1.00
158:							
Rock outcrop	70	Not rated		Not rated		Not rated	

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
158:							
Earsman	20	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Content of large stones	1.00			Content of large stones	1.00
		Slope	1.00			Slope	1.00
						Seepage	0.52
159:							
Rock outcrop	50	Not rated		Not rated		Not rated	
Haploborolls	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Seepage	1.00	Depth to bedrock	1.00
		Seepage	1.00	Depth to bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Seepage	0.52
160:							
Rock outcrop	70	Not rated		Not rated		Not rated	
Torriorthents	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00			Slope	1.00
		Content of large stones	0.79			Content of large stones	0.79
						Seepage	0.22
161:							
Rock River	85	Not limited		Not limited		Somewhat limited	
						Seepage	0.52
162:							
Rock River	85	Not limited		Not limited		Somewhat limited	
						Seepage	0.52
163:							
Rock River	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Seepage	0.52
164:							
Rock River	50	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63	Slope	0.63
Taffom	25	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.63	Slope	0.63	Slope	0.63
165:							
Rogrube sandy loam	50	Not limited		Not limited		Not limited	
Rogrube clay loam	25	Not limited		Not limited		Not limited	
166:							
Routt	80	Very limited		Somewhat limited		Very limited	
		Too clayey	1.00	Slope	0.96	Too clayey	1.00
		Slope	0.96			Slope	0.96

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
167:							
Routt	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Too clayey	0.50			Too clayey	0.50
Cochetopa	25	Very limited		Very limited		Very limited	
		Too clayey	1.00	Slope	1.00	Too clayey	1.00
		Slope	1.00			Slope	1.00
Binco	20	Very limited		Very limited		Very limited	
		Too clayey	1.00	Slope	1.00	Too clayey	1.00
		Slope	1.00			Slope	1.00
168:							
Ruedloff	85	Very limited		Not limited		Very limited	
		Too sandy	1.00			Seepage	1.00
						Too sandy	0.50
169:							
Ruedloff	60	Very limited		Very limited		Very limited	
		Too sandy	1.00	Slope	1.00	Too sandy	1.00
		Slope	1.00			Seepage	1.00
						Slope	1.00
Dunul	30	Very limited		Very limited		Very limited	
		Too sandy	1.00	Slope	1.00	Seepage	1.00
		Slope	1.00			Slope	1.00
						Gravel content	0.57
						Too sandy	0.50
170:							
Ryan Park	85	Very limited		Somewhat limited		Somewhat limited	
		Too sandy	1.00	Slope	0.04	Seepage	0.52
		Slope	0.04			Too sandy	0.50
						Slope	0.04
171:							
Ryan Park	85	Very limited		Not limited		Very limited	
		Too sandy	1.00			Too sandy	1.00
						Seepage	1.00
172:							
Ryan Park	50	Very limited		Very limited		Very limited	
		Too sandy	1.00	Slope	1.00	Slope	1.00
		Slope	1.00			Seepage	0.52
						Too sandy	0.50
Coyet	30	Very limited		Very limited		Very limited	
		Too sandy	1.00	Slope	1.00	Slope	1.00
		Slope	1.00			Seepage	0.52
						Too sandy	0.50
173:							
Ryark	65	Very limited		Somewhat limited		Very limited	
		Too sandy	1.00	Slope	0.04	Too sandy	1.00
		Slope	0.04			Seepage	1.00
						Slope	0.04
Powderwash	20	Very limited		Somewhat limited		Very limited	
		Depth to bedrock	1.00	Slope	0.04	Depth to bedrock	1.00
		Slope	0.04			Slope	0.04

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
174:							
Ryark	70	Very limited		Not limited		Very limited	
		Too sandy	1.00			Too sandy	1.00
						Seepage	1.00
Maybell	15	Very limited		Not limited		Very limited	
		Too sandy	1.00			Too sandy	1.00
						Seepage	1.00
175:							
Sandwash	40	Very limited		Not limited		Very limited	
		Depth to bedrock	1.00			Depth to bedrock	1.00
Langspring	30	Not limited		Not limited		Not limited	
Baston	20	Very limited		Not limited		Very limited	
		Depth to bedrock	1.00			Depth to bedrock	1.00
176:							
Schooner	50	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Too sandy	1.00			Seepage	1.00
		Slope	1.00			Slope	1.00
						Too sandy	0.50
Rock outcrop	35	Not rated		Not rated		Not rated	
177:							
Schooner	55	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Too sandy	1.00			Seepage	1.00
		Slope	1.00			Slope	1.00
						Too sandy	0.50
Tricera	25	Very limited		Somewhat limited		Somewhat limited	
		Too sandy	1.00	Slope	0.16	Seepage	0.52
		Slope	0.16			Too sandy	0.50
						Slope	0.16
178:							
Simanni	50	Very limited		Not limited		Very limited	
		Too sandy	1.00			Seepage	1.00
						Too sandy	0.50
Ruedloff	40	Very limited		Not limited		Very limited	
		Too sandy	1.00			Seepage	1.00
						Too sandy	0.50
179:							
Skyway, dry	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Seepage	1.00	Slope	1.00
		Seepage	1.00	Depth to bedrock	1.00	Seepage	0.52
180:							
Spool	55	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Too sandy	1.00			Slope	1.00
		Slope	1.00			Seepage	0.52
						Too sandy	0.50

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
180:							
Maybell	30	Very limited		Somewhat limited		Very limited	
		Too sandy	1.00	Slope	0.16	Too sandy	1.00
		Slope	0.16			Seepage	1.00
						Slope	0.16
181:							
Stunner	90	Not limited		Not limited		Somewhat limited	
						Seepage	0.52
182:							
Stunner, moist	55	Not limited		Not limited		Not limited	
Emlin	35	Not limited		Not limited		Not limited	
183:							
Styers	45	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Too clayey	1.00	Slope	1.00	Too clayey	1.00
		Slope	1.00			Hard to compact	1.00
						Slope	1.00
Ironsprings	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Seepage	0.52
Maysprings	15	Very limited		Very limited		Very limited	
		Too sandy	1.00	Slope	1.00	Too sandy	1.00
		Slope	1.00			Seepage	1.00
						Slope	1.00
184:							
Styers	40	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Too clayey	1.00	Slope	1.00	Too clayey	1.00
		Slope	1.00			Hard to compact	1.00
						Slope	1.00
Pinelli	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Taffom	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
185:							
Taffom	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.04	Slope	0.04	Slope	0.04
186:							
Talamantes	85	Not limited		Not limited		Not limited	
187:							
Talamantes	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.37	Slope	0.37	Slope	0.37
188:							
Talamantes, saline--	85	Not limited		Not limited		Not limited	

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
189:							
Tipper	55	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Too sandy	1.00			Seepage	1.00
		Slope	1.00			Slope	1.00
						Too sandy	0.50
Crustown	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Slope	1.00			Slope	1.00
						Seepage	1.00
190:							
Tipperary	90	Very limited		Somewhat limited		Very limited	
		Too sandy	1.00	Slope	0.84	Too sandy	1.00
		Slope	0.84			Seepage	1.00
						Slope	0.84
191:							
Tipperary	90	Very limited		Not limited		Very limited	
		Too sandy	1.00			Seepage	1.00
						Too sandy	0.50
192:							
Tipperary	50	Very limited		Not limited		Very limited	
		Too sandy	1.00			Seepage	1.00
						Too sandy	0.50
Willwood	40	Very limited		Not limited		Very limited	
		Too sandy	1.00			Seepage	1.00
						Gravel content	1.00
						Too sandy	0.50
193:							
Tisworth	85	Not limited		Not limited		Not limited	
194:							
Tolman	50	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Content of large stones	1.00	Slope	1.00	Content of large stones	1.00
		Slope	1.00			Slope	1.00
Duffymont	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage	1.00	Slope	1.00	Content of large stones	1.00
		Content of large stones	1.00			Slope	1.00
		Slope	1.00			Seepage	0.52
195:							
Torriorthents	95	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Slope	1.00			Slope	1.00
		Content of large stones	0.54			Content of large stones	0.54
						Seepage	0.22

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
196:							
Torriorthents-------	50	Very limited		Not limited		Very limited	
		Depth to bedrock	1.00			Depth to bedrock	1.00
		Content of large stones	0.54			Content of large stones	0.54
						Seepage	0.22
Baston--------------	35	Very limited		Not limited		Very limited	
		Depth to bedrock	1.00			Depth to bedrock	1.00
197:							
Torriorthents-------	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00			Slope	1.00
		Content of large stones	0.66			Content of large stones	0.66
						Seepage	0.22
Rock outcrop, sandstone----------	30	Not rated		Not rated		Not rated	
198:							
Torriorthents-------	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00			Slope	1.00
Rock outcrop, shale--------------	40	Not rated		Not rated		Not rated	
199:							
Torriorthents-------	60	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Slope	1.00			Slope	1.00
Torripsamments------	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Too sandy	1.00			Seepage	1.00
		Slope	1.00			Slope	1.00
						Too sandy	0.50
200:							
Tresano-------------	80	Not limited		Not limited		Not limited	
201:							
Tresano-------------	35	Not limited		Not limited		Not limited	
Hiatha--------------	30	Very limited		Somewhat limited		Very limited	
		Depth to bedrock	1.00	Slope	0.84	Depth to bedrock	1.00
		Slope	0.84			Hard to compact	1.00
						Slope	0.84
Kandaly-------------	15	Very limited		Not limited		Very limited	
		Too sandy	1.00			Seepage	1.00
						Too sandy	0.50
202:							
Turzo---------------	90	Not limited		Not limited		Not limited	
203:							
Turzo, saline-------	90	Very limited		Not limited		Not limited	
		Salinity	1.00				

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
204:							
Typic Natrargids----	80	Not limited		Not limited		Not limited	
205:							
Uffens----------	90	Not limited		Not limited		Somewhat limited	
						Seepage	0.52
206:							
Ustorthents, frigid----------	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Content of large stones	1.00	Seepage	1.00	Content of large stones	1.00
		Seepage	1.00			Seepage	0.22
Borolls----------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
207:							
Vermillion----------	40	Very limited		Somewhat limited		Very limited	
		Depth to bedrock	1.00	Slope	0.96	Depth to bedrock	1.00
		Slope	0.96			Slope	0.96
						Gravel content	0.03
Langspring----------	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.96	Slope	0.96	Slope	0.96
208:							
Wallson----------	50	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.04	Slope	0.04	Seepage	0.52
						Slope	0.04
Tricera----------	35	Very limited		Somewhat limited		Somewhat limited	
		Too sandy	1.00	Slope	0.04	Seepage	0.52
		Slope	0.04			Too sandy	0.50
						Slope	0.04
209:							
Weed----------	85	Very limited		Not limited		Somewhat limited	
		Seepage	1.00			Seepage	0.52
210:							
Willwood----------	55	Very limited		Not limited		Very limited	
		Too sandy	1.00			Too sandy	1.00
		Content of large stones	1.00			Seepage	1.00
						Content of large stones	1.00
Sheppard, cool------	35	Very limited		Not limited		Very limited	
		Too sandy	1.00			Seepage	1.00
						Too sandy	0.50

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
211:							
Willwood	55	Very limited		Very limited		Very limited	
		Too sandy	1.00	Slope	1.00	Too sandy	1.00
		Slope	1.00			Seepage	1.00
		Content of large stones	1.00			Slope	1.00
						Content of large stones	1.00
						Gravel content	0.01
Tipperary	35	Very limited		Very limited		Very limited	
		Too sandy	1.00	Slope	1.00	Seepage	1.00
		Slope	1.00			Slope	1.00
						Too sandy	0.50
212:							
Willwood	60	Very limited		Not limited		Very limited	
		Too sandy	1.00			Too sandy	1.00
		Content of large stones	1.00			Seepage	1.00
						Content of large stones	1.00
Tipperary, cobbly substratum	25	Very limited		Not limited		Somewhat limited	
		Too sandy	1.00			Seepage	0.52
						Too sandy	0.50
213:							
Winevada	60	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	0.96	Slope	0.96	Slope	0.96
Splitro	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage	1.00	Slope	0.96	Slope	0.96
		Slope	0.96			Seepage	0.52
214:							
Winevada	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
Splitro	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Seepage	1.00			Seepage	0.52
215:							
Winkleman	85	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.02
		Flooding	0.40	Flooding	0.40		
216:							
Yamo	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.04	Slope	0.04	Slope	0.04
217:							
Yamo	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
218:							
Yellowwash----------	50	Very limited		Somewhat limited		Very limited	
		Depth to bedrock	1.00	Slope	0.16	Depth to bedrock	1.00
		Slope	0.16			Slope	0.16
						Gravel content	0.12
Piezon--------------	35	Very limited		Somewhat limited		Very limited	
		Depth to bedrock	1.00	Slope	0.16	Depth to bedrock	1.00
		Slope	0.16			Slope	0.16
219:							
Youga---------------	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Too clayey	0.50	Slope	0.04	Too clayey	0.50
		Slope	0.04			Slope	0.04
220:							
Youga---------------	50	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Seepage	1.00	Seepage	0.52
Dinnen--------------	40	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Seepage	1.00	Seepage	0.52
221:							
Youga---------------	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage	1.00				
Gelkie--------------	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage	1.00				
Clayburn, warm------	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00		
222:							
Youngston, cool-----	90	Very limited		Very limited		Not limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00		
		Flooding	0.40	Flooding	0.40		
223:							
Youngston, well drained----------	90	Somewhat limited		Somewhat limited		Not limited	
		Flooding	0.40	Flooding	0.40		
224:							
Zillion-------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.85			Content of large stones	0.85
Barkelew, moist-----	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.41			Content of large stones	0.41
						Gravel content	0.04

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
224:							
Grapit	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.01			Carbonate content	1.00
						Gravel content	0.83
						Content of large stones	0.01
225:							
Abracon	45	Not limited		Not limited		Not limited	
Solirec	40	Not limited		Not limited		Not limited	
226:							
Arches	45	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Slope	1.00			Seepage	1.00
		Too sandy	1.00			Slope	1.00
						Too sandy	1.00
Mespun	20	Very limited		Very limited		Very limited	
		Too sandy	1.00	Slope	1.00	Too sandy	1.00
		Slope	1.00			Seepage	1.00
						Slope	1.00
Rock outcrop	20	Not rated		Not rated		Not rated	
227:							
Bankard family	55	Very limited		Somewhat limited		Very limited	
		Too sandy	1.00	Flooding	0.40	Too sandy	1.00
		Flooding	0.40			Seepage	1.00
Cameo	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Flooding	0.40	Flooding	0.40	Seepage	0.52
228:							
Bondman	50	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Slope	1.00			Slope	1.00
						Seepage	0.22
Rock outcrop	35	Not rated		Not rated		Not rated	
229:							
Cameo	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Flooding	0.40	Flooding	0.40	Seepage	0.52
230:							
Cragnot	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.12			Carbonate content	1.00
						Gravel content	0.98
						Content of large stones	0.12

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
230:							
Pensore	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Slope	1.00			Slope	1.00
		Content of large stones	0.96			Carbonate content	1.00
						Content of large stones	0.96
						Seepage	0.22
Grapit	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.94			Carbonate content	1.00
						Content of large stones	0.94
						Gravel content	0.23
231:							
Green River	70	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too sandy	1.00
		Too sandy	1.00	Flooding	0.40	Seepage	0.22
		Flooding	0.40			Depth to saturated zone	0.09
Fluvaquents	15	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Too sandy	1.00
		Too sandy	1.00	Seepage	1.00	Seepage	1.00
		Seepage	1.00				
232:							
Lakebench	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Seepage	0.52
Strell	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage	1.00	Slope	1.00	Too sandy	1.00
		Too sandy	1.00			Seepage	1.00
		Slope	1.00			Slope	1.00
233:							
Lakebench	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Seepage	0.52
Yampa	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Seepage	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00			Content of large stones	1.00
234:							
Mantlemine	85	Somewhat limited		Not limited		Somewhat limited	
		Too clayey	0.50			Too clayey	0.50
235:							
Mantlemine	55	Not limited		Not limited		Not limited	
Emlin	30	Not limited		Not limited		Not limited	

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
236:							
Mido	85	Very limited		Not limited		Very limited	
		Too sandy	1.00			Seepage	1.00
						Too sandy	0.50
237:							
Mikim loam	55	Not limited		Not limited		Not limited	
Mikim silt loam	35	Not limited		Not limited		Not limited	
238:							
Milok	85	Not limited		Not limited		Somewhat limited	
						Seepage	0.52
239:							
Milok	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Seepage	0.52
Solirec	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
Strych	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00			Content of large stones	1.00
						Seepage	0.22
240:							
Milok	70	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
						Seepage	0.52
Strych	20	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.96	Slope	0.96	Slope	0.96
		Content of large stones	0.96			Content of large stones	0.96
						Seepage	0.52
						Gravel content	0.36
241:							
Pensore	60	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Slope	1.00			Slope	1.00
		Content of large stones	0.96			Carbonate content	1.00
						Content of large stones	0.96
						Seepage	0.22
Roto	25	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Gravel content	1.00
		Seepage	1.00	Seepage	1.00	Slope	1.00
		Content of large stones	0.08			Carbonate content	1.00
						Seepage	0.22
242:							
Riverwash	85	Not rated		Not rated		Not rated	

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
243:							
Rizno	35	Very limited		Somewhat limited		Very limited	
		Depth to bedrock	1.00	Slope	0.96	Depth to bedrock	1.00
		Slope	0.96			Slope	0.96
		Content of large stones	0.32			Seepage	0.52
						Content of large stones	0.32
Windcomb	35	Very limited		Somewhat limited		Very limited	
		Depth to bedrock	1.00	Slope	0.96	Depth to bedrock	1.00
		Slope	0.96			Gravel content	1.00
						Slope	0.96
Anasazi	15	Very limited		Somewhat limited		Very limited	
		Depth to bedrock	1.00	Slope	0.96	Depth to bedrock	1.00
		Slope	0.96			Slope	0.96
						Seepage	0.52
						Gravel content	0.01
244:							
Rock outcrop	60	Not rated		Not rated		Not rated	
Hackling	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Slope	1.00			Slope	1.00
		Content of large stones	1.00			Content of large stones	1.00
						Seepage	0.52
245:							
Rock outcrop	30	Not rated		Not rated		Not rated	
Torriorthents	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00			Slope	1.00
		Content of large stones	0.01			Gravel content	0.90
						Seepage	0.14
						Content of large stones	0.01
Ustorthents	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Content of large stones	0.20			Content of large stones	0.20
246:							
Schoonover	55	Very limited		Somewhat limited		Very limited	
		Depth to bedrock	1.00	Slope	0.96	Depth to bedrock	1.00
		Slope	0.96			Gravel content	1.00
						Slope	0.96
Duffymont	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage	1.00	Slope	0.96	Content of large stones	1.00
		Content of large stones	1.00			Slope	0.96
		Slope	0.96			Seepage	0.52

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
247:							
Stout	60	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage	1.00	Slope	1.00	Slope	1.00
		Slope	1.00			Seepage	0.52
Rock outcrop	30	Not rated		Not rated		Not rated	
248:							
Strych	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00			Content of large stones	1.00
						Seepage	0.22
Mellenthin	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Slope	1.00			Slope	1.00
		Content of large stones	1.00			Content of large stones	1.00
						Seepage	0.52
249:							
Zillion	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00			Content of large stones	1.00
Yampa	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00	Seepage	1.00
		Content of large stones	1.00			Content of large stones	1.00
Clyl	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	0.82			Carbonate content	1.00
						Content of large stones	0.82
						Gravel content	0.08
250:							
Abracon	85	Not limited		Not limited		Not limited	
251:							
Badland	60	Not rated		Not rated		Not rated	
Renegade	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00	Content of large stones	1.00
		Seepage	1.00	Depth to bedrock	0.01		
		Content of large stones	1.00			Seepage	0.52
						Depth to bedrock	0.01
252:							
Bigtom	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00			Content of large stones	1.00
		Too clayey	0.50			Too clayey	0.50

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
252:							
Namlot	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Content of large stones	0.97			Content of large stones	0.97
						Gravel content	0.19
Dokie	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00	Seepage	1.00	Content of large stones	1.00
		Seepage	1.00			Seepage	0.22
253:							
Clapper	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.96	Slope	0.96	Slope	0.96
						Gravel content	0.70
						Seepage	0.22
254:							
Cliff	85	Not limited		Not limited		Somewhat limited	
						Seepage	0.52
255:							
Clyl	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00			Carbonate content	1.00
						Content of large stones	1.00
Pinerid	40	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Carbonate content	1.00
						Gravel content	1.00
						Slope	1.00
256:							
Cortyzack	65	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.96	Slope	0.96	Slope	0.96
		Too clayey	0.50			Too clayey	0.50
Diagulch	20	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Seepage	1.00	Slope	0.04
		Slope	0.04	Slope	0.04		
257:							
Cortyzack	55	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.96	Slope	0.96	Slope	0.96
		Too clayey	0.50			Too clayey	0.50
Duffymont	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Seepage	1.00	Slope	0.96	Content of large stones	1.00
		Content of large stones	1.00			Slope	0.96
		Slope	0.96			Seepage	0.52

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
258:							
Cortyzack	45	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.96	Slope	0.96	Slope	0.96
		Too clayey	0.50			Too clayey	0.50
Flynncove	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Seepage	1.00	Seepage	1.00	Content of large stones	1.00
		Content of large stones	1.00			Seepage	0.22
259:							
Denco	45	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Slope	1.00			Slope	1.00
Gerst	40	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Slope	1.00			Slope	1.00
260:							
Dokie	70	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00	Seepage	1.00	Content of large stones	1.00
		Seepage	1.00			Seepage	0.22
Flynncove	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00			Content of large stones	1.00
261:							
Dokie	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00	Seepage	1.00	Content of large stones	1.00
		Seepage	1.00			Seepage	0.22
Namlot	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Slope	1.00
		Content of large stones	0.97			Content of large stones	0.97
						Gravel content	0.19
262:							
Gompers	85	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Slope	1.00			Gravel content	1.00
						Slope	1.00
						Seepage	0.52
263:							
Hanksville	85	Very limited		Somewhat limited		Very limited	
		Depth to bedrock	1.00	Slope	0.96	Depth to bedrock	1.00
		Slope	0.96			Slope	0.96
264:							
Mikim	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.04	Slope	0.04	Slope	0.04

Table 14.-- Sanitary facilities--Daily cover for trench and area landfills--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
265:							
Mikim	85	Not limited		Not limited		Not limited	
266:							
Rock outcrop	40	Not rated		Not rated		Not rated	
Boxring	25	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Content of large stones	1.00			Content of large stones	1.00
		Slope	1.00			Slope	1.00
Tridell	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Content of large stones	1.00			Content of large stones	1.00
267:							
Solirec	35	Not limited		Not limited		Not limited	
Abracon	30	Not limited		Not limited		Not limited	
Begay	20	Somewhat limited		Somewhat limited		Somewhat limited	
		Slope	0.04	Slope	0.04	Seepage	0.52
						Slope	0.04
268:							
Toliver	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Depth to bedrock	1.00	Seepage	1.00	Content of large stones	1.00
		Seepage	1.00			Seepage	0.52
		Content of large stones	1.00				
Rock outcrop	30	Not rated		Not rated		Not rated	
269:							
Walknolls	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00			Slope	1.00
						Gravel content	1.00
						Seepage	0.52
Badland	15	Not rated		Not rated		Not rated	
Rock outcrop	10	Not rated		Not rated		Not rated	
270:							
Walknolls	55	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Slope	1.00			Gravel content	1.00
						Slope	1.00
						Seepage	0.52
Gilston	35	Not limited		Not limited		Somewhat limited	
						Seepage	0.52
						Gravel content	0.03
271:							
Water	95	Not rated		Not rated		Not rated	

Table 15.--Construction materials--Potential source for gravel and sand

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The ratings given for the thickest layer are for the thickest layer above and excluding the bottom layer. The numbers in the value columns range from 0.00 to 0.99. The greater the value, the greater the likelihood that the bottom layer or thickest layer of the soil is a source of sand or gravel. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
1:					
Abor	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2:					
Abor	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
3:					
Adderton	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.10
4:					
Almy	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
5:					
Apmay	90	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.20
6:					
Avalon	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Mack	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
7:					
Avalon	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Persayo, moist	25	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Degater	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
8:					
Badland	90	Not rated		Not rated	
9:					
Baroid	55	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.07

Table 15.--Construction materials--Potential source for gravel and sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
9:					
Eghelm	35	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.04
		Thickest layer	0.00	Bottom layer	0.10
10:					
Battlement	85	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.09
11:					
Battlement, saline	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
12:					
Berlake	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.04
		Thickest layer	0.00	Bottom layer	0.33
13:					
Berlake	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.04
		Thickest layer	0.00	Bottom layer	0.33
14:					
Berlake	55	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.04
		Thickest layer	0.00	Bottom layer	0.27
Maysprings	30	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.05
		Thickest layer	0.00	Bottom layer	0.95
15:					
Berlake	35	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.04
		Thickest layer	0.00	Bottom layer	0.09
Taffom	30	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.04
		Thickest layer	0.00	Bottom layer	0.38
Gretdivid	15	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.06
		Thickest layer	0.00	Bottom layer	0.91
16:					
Bilhil	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
17:					
Binco	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 15.--Construction materials--Potential source for gravel and sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
18:					
Boltus	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Beamton	25	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
19:					
Borollic Natrargids	40	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.01
Borollic Haplargids	30	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.09
Ustic Torrifluvents	25	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.10
20:					
Brownsto	50	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.09
Castee	30	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.09
21:					
Bulkley	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
22:					
Bulkley	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
23:					
Bulkley	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
24:					
Bulkley	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Quilt	25	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 15.--Construction materials--Potential source for gravel and sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
25:					
Campspass	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
26:					
Campspass	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
27:					
Canlodore	95	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.25
		Thickest layer	0.00	Bottom layer	0.29
28:					
Carbol	40	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.01
		Thickest layer	0.00	Bottom layer	0.05
Irigul	25	Fair		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.19	Thickest layer	0.00
Rock outcrop	25	Not rated		Not rated	
29:					
Carbol	45	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.01
		Thickest layer	0.00	Bottom layer	0.05
Miracle	30	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.03
		Thickest layer	0.00	Thickest layer	0.03
30:					
Carmody	35	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.10
		Thickest layer	0.00	Thickest layer	0.10
Rock River	30	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.04
		Thickest layer	0.00	Bottom layer	0.09
Crestman	20	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.01
		Thickest layer	0.00	Bottom layer	0.39
31:					
Castee	90	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.09
32:					
Chroder	80	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.09
		Thickest layer	0.00	Thickest layer	0.09

Table 15.--Construction materials--Potential source for gravel and sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
33:					
Clayburn, warm------	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
34:					
Clayburn----------	40	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.09
		Thickest layer	0.00	Thickest layer	0.09
Foidel----------	30	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.03
		Thickest layer	0.00	Thickest layer	0.09
35:					
Clayburn----------	45	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.03
Youga, moist--------	35	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.05
36:					
Clifsand----------	60	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Chroder----------	30	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.09
		Thickest layer	0.00	Thickest layer	0.09
37:					
Cochetopa----------	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
38:					
Cochetopa----------	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
39:					
Cochetopa, warm-----	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
40:					
Cochetopa----------	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Gothic----------	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
41:					
Cochetopa----------	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 15.--Construction materials--Potential source for gravel and sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
41:					
Gothic	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
42:					
Cochetopa	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Jerry	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
43:					
Coldspring, moist	80	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.06
44:					
Cowestglen	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
45:					
Coyet	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.33
		Thickest layer	0.00	Bottom layer	0.39
46:					
Coyet	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.33
		Thickest layer	0.00	Bottom layer	0.39
47:					
Coyet	45	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.77
		Thickest layer	0.00	Bottom layer	0.93
Crestman, moist	35	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.01
		Thickest layer	0.00	Bottom layer	0.39
48:					
Crago	35	Fair		Poor	
		Bottom layer	0.06	Bottom layer	0.00
		Thickest layer	0.12	Thickest layer	0.00
Pensore	35	Fair		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.12	Thickest layer	0.00
Grapit	15	Fair		Poor	
		Bottom layer	0.19	Bottom layer	0.00
		Thickest layer	0.19	Thickest layer	0.00
49:					
Cryoborolls, slumped	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 15.--Construction materials--Potential source for gravel and sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
50:					
Cushool	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.09
51:					
Cushool	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.09
52:					
Danavore	45	Fair		Poor	
		Thickest layer	0.06	Bottom layer	0.00
		Bottom layer	0.06	Thickest layer	0.00
Waybe	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
53:					
Davtone	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Forsey	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
54:					
Deaver	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Avalon	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
55:					
Deaver	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Chipeta	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
56:					
Debone	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.10
57:					
Detra	50	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.03
		Thickest layer	0.00	Bottom layer	0.05
Cortyzack	40	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.05
		Thickest layer	0.00	Bottom layer	0.06

Table 15.--Construction materials--Potential source for gravel and sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
58:					
Diaflats	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Fondillas	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
59:					
Dranyon	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.03
60:					
Dumps, mine	100	Not rated		Not rated	
61:					
Ecklund	50	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.32
		Thickest layer	0.00	Bottom layer	0.86
Tipperary	40	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.18
		Thickest layer	0.00	Thickest layer	0.32
62:					
Eghelm	90	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.04
		Thickest layer	0.00	Thickest layer	0.08
63:					
Eghelm, moist	90	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.08
		Thickest layer	0.00	Thickest layer	0.27
64:					
Emlin	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
65:					
Emlin	65	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Tymosling	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
66:					
Evanot	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
67:					
Evanot	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 15.--Construction materials--Potential source for gravel and sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
68:					
Evanot	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Yamo	25	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
69:					
Fenster	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Thenipel	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
70:					
Fluvaquents, frequently flooded	50	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.08
Haplaquolls, frequently flooded	45	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.03
		Bottom layer	0.29	Bottom layer	0.29
71:					
Flygare, dry	85	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
72:					
Foidel, cool	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
73:					
Foidel	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
74:					
Foidel, moist	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Flygare	30	Poor		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.00
Skyway, moist	20	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.09
		Thickest layer	0.00	Thickest layer	0.10

Table 15.--Construction materials--Potential source for gravel and sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
75:					
Fonce	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.08
		Thickest layer	0.00	Bottom layer	0.91
76:					
Fonce	90	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.05
		Bottom layer	0.12	Bottom layer	0.09
77:					
Forelle	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.09
78:					
Forelle	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.09
79:					
Forelle	50	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.09
Evanot	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
80:					
Forelle	50	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.09
Evanot	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
81:					
Forelle	40	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.05
Obadia	35	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.03
82:					
Forelle	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Pinelli	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Maysprings	15	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.05
		Thickest layer	0.00	Bottom layer	0.95

Table 15.--Construction materials--Potential source for gravel and sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
83:					
Forsey	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Libeg	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
84:					
Gebson, moist	55	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.04
		Thickest layer	0.00	Bottom layer	0.06
Youga	35	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.06
		Thickest layer	0.00	Bottom layer	0.09
85:					
Giarch	90	Poor		Good	
		Bottom layer	0.00	Thickest layer	0.03
		Thickest layer	0.00		
86:					
Gracot	50	Fair		Fair	
		Bottom layer	0.00	Thickest layer	0.33
		Thickest layer	0.25	Bottom layer	0.99
Maybell	30	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.88
		Thickest layer	0.00	Bottom layer	0.98
87:					
Gretdivid	35	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.06
		Thickest layer	0.00	Bottom layer	0.91
Taffom	25	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.04
		Thickest layer	0.00	Bottom layer	0.09
Abor	15	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
88:					
Grieves	85	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.10
		Thickest layer	0.00	Thickest layer	0.10
89:					
Grieves	85	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.10
		Thickest layer	0.00	Thickest layer	0.10
90:					
Grieves	45	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.10
		Thickest layer	0.00	Thickest layer	0.10

Table 15.--Construction materials--Potential source for gravel and sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
90:					
Crestman	35	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.01
		Thickest layer	0.00	Bottom layer	0.39
91:					
Grieves	40	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.10
		Thickest layer	0.00	Thickest layer	0.32
Yamo	25	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.04
Crestman	20	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.01
		Thickest layer	0.00	Bottom layer	0.39
92:					
Grimm	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Ustic Torriorthents, shallow	40	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.09
93:					
Gullied land	85	Not rated		Not rated	
94:					
Hapney, moist	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.03
95:					
Haterton	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Piezon	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
96:					
Heathcoat	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.03
97:					
Heathcoat	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Clayburn	25	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 15.--Construction materials--Potential source for gravel and sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
98:					
Herm	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Fughes	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
99:					
Hesperus, dry	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
100:					
Hesperus	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
101:					
Hesperus	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
102:					
Holter	55	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Detra	30	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.12	Bottom layer	0.04
103:					
Iles	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
104:					
Ironco	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Mulgon, dry	25	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.02
		Thickest layer	0.00	Thickest layer	0.02
105:					
Ironsprings	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.09
		Thickest layer	0.00	Bottom layer	0.17
106:					
Ironsprings	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.09
		Thickest layer	0.00	Bottom layer	0.17
107:					
Ironsprings	40	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.09
		Thickest layer	0.00	Bottom layer	0.39

Table 15.--Construction materials--Potential source for gravel and sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
107:					
Maysprings	25	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.05
		Thickest layer	0.00	Bottom layer	0.95
Gretdivid	15	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.06
		Thickest layer	0.00	Bottom layer	0.91
108:					
Jerry	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Cochetopa	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
109:					
Joebas	60	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.06
Rock outcrop	30	Not rated		Not rated	
110:					
Kemmerer	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
111:					
Kemmerer	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Grapit	35	Fair		Fair	
		Bottom layer	0.19	Thickest layer	0.00
		Thickest layer	0.19	Bottom layer	0.05
112:					
Kemmerer	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Moyerson	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
113:					
Kemmerer	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Yamo	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
114:					
Lamphier	85	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.05
		Thickest layer	0.00	Thickest layer	0.09

Table 15.--Construction materials--Potential source for gravel and sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
115:					
Lamphier	85	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.05
		Thickest layer	0.00	Thickest layer	0.09
116:					
Lamphier	45	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.05
		Thickest layer	0.00	Thickest layer	0.09
Jerry	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
117:					
Lamphier	45	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.05
		Thickest layer	0.00	Thickest layer	0.09
Jerry	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
118:					
Lander	85	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.34	Bottom layer	0.34
119:					
Langspring	85	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.05
		Thickest layer	0.00	Thickest layer	0.05
120:					
Layoint	35	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.21
		Thickest layer	0.00	Bottom layer	0.37
Moosed	25	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.77
Berlake	20	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.04
		Thickest layer	0.00	Bottom layer	0.06
121:					
Leaps	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
122:					
Leswill	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rogrube	30	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.03

Table 15.--Construction materials--Potential source for gravel and sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
123:					
Lilsnake	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Sandwash	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
124:					
Losee	45	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.04
		Thickest layer	0.00	Bottom layer	0.09
Thornburgh, dry	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
125:					
Massadona	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
126:					
Massadona	65	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Youngston, moist	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
127:					
Maudlin	50	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.09
Duffymont	30	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
128:					
Maybell	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.33
		Thickest layer	0.00	Bottom layer	0.98
129:					
Maybell	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.91
		Thickest layer	0.00	Bottom layer	0.98
130:					
Maysprings	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.05
		Thickest layer	0.00	Bottom layer	0.95
131:					
Maysprings	50	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.06
		Thickest layer	0.00	Bottom layer	0.95

Table 15.--Construction materials--Potential source for gravel and sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
131:					
Gretdivid	30	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.06
		Thickest layer	0.00	Bottom layer	0.91
132:					
Milren	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
133:					
Miracle	50	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.03
		Thickest layer	0.00	Thickest layer	0.03
Coldspring	30	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.06
134:					
Morapos	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
135:					
Morapos	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
136:					
Morapos	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Pagoda	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
137:					
Morset	50	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.03
Youga	30	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.09
		Thickest layer	0.00	Bottom layer	0.09
138:					
Moyerson	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rentsac	30	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.14	Bottom layer	0.09
139:					
Muggins	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 15.--Construction materials--Potential source for gravel and sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
140:					
Ninot	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Crago	20	Fair		Fair	
		Bottom layer	0.06	Thickest layer	0.04
		Thickest layer	0.12	Bottom layer	0.05
Garlips	15	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
141:					
Nortez, cool	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Morapos	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
142:					
Nortez, cool	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Morapos	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
143:					
Nunemaker	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.03
144:					
Pagoda	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
145:					
Pagoda	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
146:					
Pavillion	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Degater	25	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
147:					
Peeler	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.02
		Thickest layer	0.00	Bottom layer	0.05

Table 15.--Construction materials--Potential source for gravel and sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
148:					
Pilotpeak	45	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.38	Bottom layer	0.09
Grubrob	35	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.05
		Thickest layer	0.00	Bottom layer	0.10
149:					
Pinelli	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
150:					
Pinelli	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.02
151:					
Pinelli, dry	85	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.01
152:					
Pinridge	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.04
		Thickest layer	0.00	Bottom layer	0.09
153:					
Pricecreek	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
154:					
Quealman	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.06
		Thickest layer	0.00	Bottom layer	0.08
155:					
Rencot	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Duffymont	30	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
156:					
Rentsac	85	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.14	Bottom layer	0.09
157:					
Rentsac	40	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.14	Bottom layer	0.09
Moyerson	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 15.--Construction materials--Potential source for gravel and sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
158:					
Rock outcrop--------	70	Not rated		Not rated	
Earsman----------	20	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.09
159:					
Rock outcrop--------	50	Not rated		Not rated	
Haploborolls--------	35	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.09
		Thickest layer	0.00	Thickest layer	0.09
160:					
Rock outcrop--------	70	Not rated		Not rated	
Torriorthents-------	25	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.01
		Thickest layer	0.00	Bottom layer	0.09
161:					
Rock River----------	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.04
		Thickest layer	0.00	Bottom layer	0.09
162:					
Rock River----------	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.04
		Thickest layer	0.00	Bottom layer	0.09
163:					
Rock River----------	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.04
		Thickest layer	0.00	Bottom layer	0.09
164:					
Rock River----------	50	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.09
		Thickest layer	0.00	Thickest layer	0.09
Taffom--------------	25	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.04
		Thickest layer	0.00	Bottom layer	0.38
165:					
Rogrube sandy loam---------------	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rogrube clay loam---------------	25	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
166:					
Routt---------------	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 15.--Construction materials--Potential source for gravel and sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
167:					
Routt	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Cochetopa	25	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Binco	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
168:					
Ruedloff	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.09
		Thickest layer	0.00	Bottom layer	0.39
169:					
Ruedloff	60	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.09
		Thickest layer	0.00	Bottom layer	0.93
Dunul	30	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.30
		Thickest layer	0.00	Bottom layer	0.37
170:					
Ryan Park	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.09
		Thickest layer	0.00	Bottom layer	0.39
171:					
Ryan Park	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.09
		Thickest layer	0.00	Bottom layer	0.99
172:					
Ryan Park	50	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.09
		Thickest layer	0.00	Bottom layer	0.39
Coyet	30	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.33
		Thickest layer	0.00	Bottom layer	0.39
173:					
Ryark	65	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.09
		Thickest layer	0.00	Bottom layer	0.99
Powderwash	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
174:					
Ryark	70	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.09
		Thickest layer	0.00	Bottom layer	0.99

Table 15.--Construction materials--Potential source for gravel and sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
174:					
Maybell	15	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.88
		Thickest layer	0.00	Bottom layer	0.98
175:					
Sandwash	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Langspring	30	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.05
		Thickest layer	0.00	Bottom layer	0.09
Baston	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
176:					
Schooner	50	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.15
Rock outcrop	35	Not rated		Not rated	
177:					
Schooner	55	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.15
Tricera	25	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.37
		Thickest layer	0.00	Bottom layer	0.99
178:					
Simanni	50	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.05
		Thickest layer	0.00	Bottom layer	0.35
Ruedloff	40	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.09
		Thickest layer	0.00	Bottom layer	0.39
179:					
Skyway, dry	85	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.09
		Thickest layer	0.00	Thickest layer	0.10
180:					
Spool	55	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.32
Maybell	30	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.32
		Thickest layer	0.00	Bottom layer	0.98
181:					
Stunner	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.09
		Thickest layer	0.00	Bottom layer	0.27

Table 15.--Construction materials--Potential source for gravel and sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
182:					
Stunner, moist	55	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.09
Emlin	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
183:					
Styers	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Ironsprings	25	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.09
		Thickest layer	0.00	Bottom layer	0.39
Maysprings	15	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.05
		Thickest layer	0.00	Bottom layer	0.95
184:					
Styers	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Pinelli	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Taffom	15	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.04
		Thickest layer	0.00	Bottom layer	0.38
185:					
Taffom	85	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.04
186:					
Talamantes	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.09
187:					
Talamantes	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.09
188:					
Talamantes, saline	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
189:					
Tipper	55	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.33
		Thickest layer	0.00	Thickest layer	0.33

Table 15.--Construction materials--Potential source for gravel and sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
189:					
Crustown	35	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.37
190:					
Tipperary	90	Poor		Good	
		Bottom layer	0.00	Bottom layer	0.99
		Thickest layer	0.00		
191:					
Tipperary	90	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.18
		Thickest layer	0.00	Thickest layer	0.32
192:					
Tipperary	50	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.18
		Thickest layer	0.00	Thickest layer	0.32
Willwood	40	Fair		Fair	
		Thickest layer	0.00	Bottom layer	0.45
		Bottom layer	0.62	Thickest layer	0.45
193:					
Tisworth	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
194:					
Tolman	50	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.05
Duffymont	35	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
195:					
Torriorthents	95	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
196:					
Torriorthents	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Baston	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
197:					
Torriorthents	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rock outcrop, sandstone	30	Not rated		Not rated	

Table 15.--Construction materials--Potential source for gravel and sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
198:					
Torriorthents-------	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rock outcrop, shale--------------	40	Not rated		Not rated	
199:					
Torriorthents-------	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Torripsamments------	30	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.37
		Thickest layer	0.00	Bottom layer	0.41
200:					
Tresano-------------	80	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.04
		Thickest layer	0.00	Bottom layer	0.09
201:					
Tresano-------------	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Hiatha--------------	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Kandaly-------------	15	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.18
		Thickest layer	0.00	Bottom layer	0.21
202:					
Turzo---------------	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
203:					
Turzo, saline-------	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
204:					
Typic Natrargids----	80	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.02
205:					
Uffens--------------	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.99
206:					
Ustorthents, frigid------------	55	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 15.--Construction materials--Potential source for gravel and sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
206:					
Borolls	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
207:					
Vermillion	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Langspring	35	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.05
		Thickest layer	0.00	Thickest layer	0.05
208:					
Wallson	50	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.06
		Thickest layer	0.00	Thickest layer	0.10
Tricera	35	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.37
		Thickest layer	0.00	Bottom layer	0.99
209:					
Weed	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.04
		Thickest layer	0.00	Bottom layer	0.09
210:					
Willwood	55	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Sheppard, cool	35	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.25
		Thickest layer	0.00	Thickest layer	0.25
211:					
Willwood	55	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Tipperary	35	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.18
		Thickest layer	0.00	Thickest layer	0.32
212:					
Willwood	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Tipperary, cobbly substratum	25	Poor		Fair	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.00	Thickest layer	0.30
213:					
Winevada	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 15.--Construction materials--Potential source for gravel and sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
213:					
Splitro	30	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.10
214:					
Winevada	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Splitro	30	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.10
215:					
Winkleman	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
216:					
Yamo	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
217:					
Yamo	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
218:					
Yellowwash	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Piezon	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
219:					
Youga	90	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.05
220:					
Youga	50	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.05
		Thickest layer	0.00	Bottom layer	0.09
Dinnen	40	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.10
		Thickest layer	0.00	Thickest layer	0.10
221:					
Youga	40	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.05
		Thickest layer	0.00	Bottom layer	0.09
Gelkie	30	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.06
		Thickest layer	0.00	Bottom layer	0.10

Table 15.--Construction materials--Potential source for gravel and sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
221:					
Clayburn, warm------	20	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.04
		Thickest layer	0.00	Bottom layer	0.09
222:					
Youngston, cool-----	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
223:					
Youngston, well drained----------	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
224:					
Zillion----------	35	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Barkelew, moist-----	25	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.04
Grapit----------	20	Fair		Poor	
		Bottom layer	0.19	Bottom layer	0.00
		Thickest layer	0.19	Thickest layer	0.00
225:					
Abracon----------	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Solirec----------	40	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.05
226:					
Arches----------	45	Poor		Good	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00		
Mespun----------	20	Poor		Good	
		Bottom layer	0.00		
		Thickest layer	0.00		
Rock outcrop--------	20	Not rated		Not rated	
227:					
Bankard family------	55	Poor		Good	
		Bottom layer	0.00	Bottom layer	0.99
		Thickest layer	0.00		
Cameo----------	35	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.10
		Thickest layer	0.00	Thickest layer	0.16

Table 15.--Construction materials--Potential source for gravel and sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
228:					
Bondman	50	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.04
Rock outcrop	35	Not rated		Not rated	
229:					
Cameo	85	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.10
		Thickest layer	0.00	Thickest layer	0.16
230:					
Cragnot	35	Fair		Poor	
		Bottom layer	0.19	Bottom layer	0.00
		Thickest layer	0.43	Thickest layer	0.00
Pensore	35	Fair		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.43	Thickest layer	0.00
Grapit	15	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
231:					
Green River	70	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.07
		Thickest layer	0.00	Thickest layer	0.10
Fluvaquents	15	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.97
		Thickest layer	0.00	Thickest layer	0.99
232:					
Lakebench	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Strell	35	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.99
233:					
Lakebench	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Yampa	35	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
234:					
Mantlemine	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
235:					
Mantlemine	55	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 15.--Construction materials--Potential source for gravel and sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
235:					
Emlin	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
236:					
Mido	85	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.37
		Thickest layer	0.00	Thickest layer	0.37
237:					
Mikim loam	55	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Mikim silt loam	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
238:					
Milok	85	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.09
		Thickest layer	0.00	Thickest layer	0.10
239:					
Milok	45	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.09
		Thickest layer	0.00	Thickest layer	0.10
Solirec	25	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Strych	15	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
240:					
Milok	70	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Strych	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
241:					
Pensore	60	Fair		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.43	Thickest layer	0.00
Roto	25	Fair		Fair	
		Thickest layer	0.04	Thickest layer	0.04
		Bottom layer	0.49	Bottom layer	0.06
242:					
Riverwash	85	Not rated		Not rated	

Table 15.--Construction materials--Potential source for gravel and sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
243:					
Rizno	35	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.10
Windcomb	35	Fair		Poor	
		Thickest layer	0.04	Bottom layer	0.00
		Bottom layer	0.19	Thickest layer	0.00
Anasazi	15	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.12	Bottom layer	0.36
244:					
Rock outcrop	60	Not rated		Not rated	
Hackling	30	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
245:					
Rock outcrop	30	Not rated		Not rated	
Torriorthents	30	Fair		Poor	
		Thickest layer	0.09	Bottom layer	0.00
		Bottom layer	0.12	Thickest layer	0.00
Ustorthents	30	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.04
		Thickest layer	0.00	Thickest layer	0.04
246:					
Schoonover	55	Fair		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.12	Thickest layer	0.00
Duffymont	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
247:					
Stout	60	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.09
Rock outcrop	30	Not rated		Not rated	
248:					
Strych	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Mellenthin	35	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
249:					
Zillion	40	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00

Table 15.--Construction materials--Potential source for gravel and sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
249:					
Yampa	25	Poor		Poor	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.00
Clyl	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
250:					
Abracon	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
251:					
Badland	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Renegade	25	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
252:					
Bigtom	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Namlot	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Dokie	15	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
253:					
Clapper	85	Fair		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.12	Bottom layer	0.05
254:					
Cliff	85	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.09
		Thickest layer	0.00	Thickest layer	0.10
255:					
Clyl	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Pinerid	40	Fair		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.43	Thickest layer	0.00
256:					
Cortyzack	65	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 15.--Construction materials--Potential source for gravel and sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
256:					
Diagulch	20	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.32
257:					
Cortyzack	55	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Duffymont	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
258:					
Cortyzack	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Flynncove	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
259:					
Denco	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Gerst	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
260:					
Dokie	70	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
Flynncove	15	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
261:					
Dokie	50	Poor		Poor	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.00
Namlot	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
262:					
Gompers	85	Fair		Poor	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.49	Thickest layer	0.00
263:					
Hanksville	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 15.--Construction materials--Potential source for gravel and sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
264:					
Mikim	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
265:					
Mikim	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
266:					
Rock outcrop	40	Not rated		Not rated	
Boxring	25	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Tridell	25	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
267:					
Solirec	35	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.05
Abracon	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Begay	20	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.09
		Thickest layer	0.00	Thickest layer	0.09
268:					
Toliver	55	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rock outcrop	30	Not rated		Not rated	
269:					
Walknolls	60	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.49	Bottom layer	0.09
Badland	15	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rock outcrop	10	Not rated		Not rated	
270:					
Walknolls	55	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.49	Bottom layer	0.08
Gilston	35	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.09

Table 15.--Construction materials--Potential source for gravel and sand--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
271: Water	95	Not rated		Not rated	

Table 16.--Construction materials

Potential Source for Reclamation Material, Roadfill, and Topsoil

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1:							
Abor	85	Poor		Poor		Poor	
		Too clayey	0.00	Depth to bedrock	0.00	Too clayey	0.00
		Low content of organic matter	0.88	Low strength	0.00	Slope	0.00
				Shrink-swell	0.12	Depth to bedrock	0.97
		Depth to bedrock	0.97	Slope	0.68		
		Droughty	0.99				
2:							
Abor	80	Poor		Poor		Poor	
		Too clayey	0.00	Depth to bedrock	0.00	Slope	0.00
		Low content of organic matter	0.88	Slope	0.00	Too clayey	0.00
				Low strength	0.00	Depth to bedrock	0.97
		Depth to bedrock	0.97	Shrink-swell	0.12		
		Droughty	0.99	Shrink-swell	0.12		
3:							
Adderton	90	Good		Good		Good	
4:							
Almy	90	Fair		Good		Fair	
		Low content of organic matter	0.12			Slope	0.96
		Water erosion	0.99				
5:							
Apmay	90	Fair		Fair		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.76	Hard to reclaim	0.00
						Depth to saturated zone	0.76
6:							
Avalon	45	Fair		Good		Fair	
		Low content of organic matter	0.12			Rock fragments	0.28
						Too clayey	0.57
		Carbonate content	0.80			Carbonate content	0.97
		Too clayey	0.98				
Mack	45	Fair		Good		Fair	
		Low content of organic matter	0.12			Carbonate content	0.46
		Carbonate content	0.46				
		Water erosion	0.99				
7:							
Avalon	30	Poor		Fair		Fair	
		Too alkaline	0.00	Depth to bedrock	0.07	Hard to reclaim	0.68
		Carbonate content	0.80			Carbonate content	0.80
		Low content of organic matter	0.88				
		Water erosion	0.99				

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
7:							
Persayo, moist------	25	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Slope	0.50	Slope	0.00
		Low content of organic matter	0.12				
		Water erosion	0.99				
Degater------------	20	Poor		Poor		Poor	
		Too clayey	0.00	Depth to bedrock	0.00	Too clayey	0.00
		Low content of organic matter	0.12	Low strength	0.00	Slope	0.00
				Shrink-swell	0.12	Depth to bedrock	0.99
		Droughty	0.92	Slope	0.50		
		Depth to bedrock	0.99	Slope	0.50		
8:							
Badland------------	90	Not rated		Not rated		Not rated	
9:							
Baroid-------------	55	Poor		Good		Fair	
		Wind erosion	0.00			Salinity	0.50
		Low content of organic matter	0.12			Sodium content	0.78
		Sodium content	0.78				
		Droughty	0.97				
Eghelm-------------	35	Poor		Good		Poor	
		Sodium content	0.00			Sodium content	0.00
		Too alkaline	0.00			Salinity	0.50
		Low content of organic matter	0.12			Too sandy	0.99
		Too sandy	0.99				
10:							
Battlement----------	85	Fair		Good		Good	
		Low content of organic matter	0.88				
11:							
Battlement, saline------------	80	Fair		Good		Fair	
		Salinity	0.50			Salinity	0.88
		Low content of organic matter	0.88				
		Water erosion	0.99				
12:							
Berlake------------	85	Fair		Good		Fair	
		Low content of organic matter	0.50			Hard to reclaim	0.98
		Droughty	0.99				
13:							
Berlake------------	85	Fair		Fair		Poor	
		Low content of organic matter	0.50	Slope	0.68	Slope	0.00
						Hard to reclaim	0.98
		Droughty	0.99				

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
14:							
Berlake	55	Fair		Good		Fair	
		Low content of organic matter	0.50			Hard to reclaim	0.98
Maysprings	30	Fair		Good		Good	
		Low content of organic matter	0.12				
		Droughty	0.85				
15:							
Berlake	35	Fair		Good		Poor	
		Low content of organic matter	0.88			Slope	0.00
Taffom	30	Fair		Good		Poor	
		Low content of organic matter	0.12			Slope	0.00
Gretdivid	15	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Slope	0.00
		Droughty	0.05			Rock fragments	0.03
		Low content of organic matter	0.12			Hard to reclaim	0.98
16:							
Bilhil	85	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Low content of organic matter	0.12	Shrink-swell	0.15		
17:							
Binco	90	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Slope	0.00
		Low content of organic matter	0.88	Slope	0.00	Too clayey	0.00
				Shrink-swell	0.12		
18:							
Boltus	50	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Low strength	0.00	Too clayey	0.00
		Too clayey	0.00	Shrink-swell	0.12	Salinity	0.50
		Low content of organic matter	0.12				
		Water erosion	0.99				
Beamton	25	Fair		Poor		Fair	
		Too clayey	0.08	Depth to bedrock	0.00	Too clayey	0.05
		Low content of organic matter	0.12	Low strength	0.00	Depth to bedrock	0.79
		Droughty	0.65	Shrink-swell	0.87		
		Depth to bedrock	0.79				
		Water erosion	0.99				

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
19:							
Borollic Natrargids	40	Poor		Poor		Poor	
		Sodium content	0.00	Low strength	0.00	Sodium content	0.00
		Too alkaline	0.00	Shrink-swell	0.87	Salinity	0.00
		Too clayey	0.32			Too clayey	0.23
		Salinity	0.88				
		Low content of organic matter	0.88				
Borollic Haplargids	30	Fair		Good		Fair	
		Low content of organic matter	0.88			Slope	0.37
Ustic Torrifluvents	25	Fair		Good		Good	
		Low content of organic matter	0.88				
20:							
Brownsto	50	Poor		Fair		Poor	
		Too alkaline	0.00	Cobble content	0.96	Hard to reclaim	0.00
		Low content of organic matter	0.12			Rock fragments	0.00
						Slope	0.04
		Carbonate content	0.46			Carbonate content	0.46
		Droughty	0.88				
Castee	30	Poor		Good		Poor	
		Carbonate content	0.00			Carbonate content	0.00
		Low content of organic matter	0.12			Slope	0.04
						Hard to reclaim	0.68
		Water erosion	0.90				
21:							
Bulkley	80	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Slope	0.00
		Low content of organic matter	0.88	Slope	0.08	Too clayey	0.00
				Shrink-swell	0.12		
22:							
Bulkley	80	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Low content of organic matter	0.88	Shrink-swell	0.12		
23:							
Bulkley	90	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Low content of organic matter	0.88	Shrink-swell	0.12	Slope	0.00
				Slope	0.68		
24:							
Bulkley	60	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Low content of organic matter	0.88	Slope	0.00	Slope	0.00
				Shrink-swell	0.12		

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
24:							
Quilt	25	Fair		Poor		Poor	
		Low content of organic matter	0.50	Slope	0.00	Slope	0.00
				Shrink-swell	0.74	Rock fragments	0.00
		Too clayey	0.88	Cobble content	0.99	Hard to reclaim	0.50
						Too clayey	0.57
25:							
Campspass	90	Fair		Poor		Fair	
		Low content of organic matter	0.88	Low strength	0.00	Hard to reclaim	0.88
				Shrink-swell	0.75	Rock fragments	0.88
		Water erosion	0.99				
26:							
Campspass	90	Fair		Poor		Poor	
		Low content of organic matter	0.88	Low strength	0.00	Slope	0.00
				Slope	0.68	Hard to reclaim	0.88
		Water erosion	0.99	Shrink-swell	0.75	Rock fragments	0.88
27:							
Canlodore	95	Poor		Poor		Poor	
		Droughty	0.00	Slope	0.00	Slope	0.00
		Stone content	0.10	Stone content	0.12	Rock fragments	0.00
		Low content of organic matter	0.12	Cobble content	0.57	Hard to reclaim	0.00
						Too sandy	0.16
		Too sandy	0.16				
		Too acid	0.84				
28:							
Carbol	40	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00			Rock fragments	0.00
Irigul	25	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Stone content	0.99	Depth to bedrock	0.00
		Low content of organic matter	0.88			Slope	0.04
		Stone content	0.93				
Rock outcrop	25	Not rated		Not rated		Not rated	
29:							
Carbol	45	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00			Rock fragments	0.00
Miracle	30	Fair		Poor		Fair	
		Droughty	0.96	Depth to bedrock	0.00	Depth to bedrock	0.97
		Depth to bedrock	0.97				
30:							
Carmody	35	Poor		Poor		Fair	
		Wind erosion	0.00	Depth to bedrock	0.00	Depth to bedrock	0.05
		Droughty	0.00			Slope	0.63
		Depth to bedrock	0.05				
		Low content of organic matter	0.88				

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
30:							
Rock River----------	30	Fair		Good		Fair	
		Low content of organic matter	0.88			Slope	0.63
Crestman----------	20	Poor		Poor		Poor	
		Wind erosion	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Droughty	0.00			Rock fragments	0.00
		Depth to bedrock	0.00			Too sandy	0.02
		Too sandy	0.02			Slope	0.63
		Low content of organic matter	0.12				
31:							
Castee----------	90	Poor		Good		Poor	
		Carbonate content	0.00			Carbonate content	0.00
		Low content of organic matter	0.12			Hard to reclaim	0.68
		Water erosion	0.90				
32:							
Chroder----------	80	Fair		Good		Fair	
		Low content of organic matter	0.12			Carbonate content	0.80
		Carbonate content	0.80				
33:							
Clayburn, warm------	85	Fair		Fair		Fair	
		Too clayey	0.98	Low strength	0.22	Slope	0.04
				Shrink-swell	0.98	Too clayey	0.86
34:							
Clayburn----------	40	Fair		Poor		Poor	
		Low content of organic matter	0.12	Slope	0.00	Slope	0.00
Foidel----------	30	Fair		Poor		Poor	
		Low content of organic matter	0.12	Slope	0.00	Slope	0.00
		Too acid	0.95				
35:							
Clayburn----------	45	Fair		Poor		Poor	
		Too clayey	0.98	Slope	0.00	Slope	0.00
				Low strength	0.22	Too clayey	0.86
				Shrink-swell	0.98		
Youga, moist--------	35	Fair		Poor		Poor	
		Too acid	0.84	Slope	0.00	Slope	0.00
		Too clayey	0.88	Low strength	0.00	Too clayey	0.63
		Low content of organic matter	0.88			Rock fragments	0.88

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
36:							
Clifsand----------	60	Poor		Fair		Poor	
		Wind erosion	0.00	Cobble content	0.56	Hard to reclaim	0.00
		Stone content	0.00	Stone content	0.56	Rock fragments	0.00
		Low content of organic matter	0.12			Carbonate content	0.68
		Droughty	0.22				
		Carbonate content	0.68				
		Cobble content	0.99				
Chroder----------	30	Poor		Good		Fair	
		Wind erosion	0.00			Carbonate content	0.80
		Low content of organic matter	0.12				
		Carbonate content	0.80				
37:							
Cochetopa----------	85	Fair		Poor		Poor	
		Too clayey	0.08	Low strength	0.00	Slope	0.00
		Low content of organic matter	0.88	Shrink-swell	0.38	Too clayey	0.06
				Slope	0.68		
38:							
Cochetopa----------	85	Fair		Poor		Poor	
		Too clayey	0.08	Slope	0.00	Slope	0.00
		Low content of organic matter	0.88	Low strength	0.00	Too clayey	0.06
				Shrink-swell	0.38		
39:							
Cochetopa, warm-----	85	Fair		Poor		Fair	
		Too clayey	0.08	Low strength	0.00	Too clayey	0.06
		Low content of organic matter	0.88	Shrink-swell	0.38		
40:							
Cochetopa----------	45	Fair		Poor		Fair	
		Too clayey	0.08	Low strength	0.00	Too clayey	0.06
		Low content of organic matter	0.88	Shrink-swell	0.38	Slope	0.16
Gothic----------	40	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Slope	0.00
		Stone content	0.41	Stone content	0.01	Too clayey	0.00
				Shrink-swell	0.23	Hard to reclaim	0.95
				Slope	0.50	Rock fragments	0.95
41:							
Cochetopa----------	40	Fair		Poor		Poor	
		Stone content	0.22	Slope	0.00	Slope	0.00
		Low content of organic matter	0.88	Low strength	0.00	Rock fragments	0.28
				Stone content	0.00		
				Shrink-swell	0.45		
Gothic----------	35	Poor		Poor		Poor	
		Too clayey	0.00	Slope	0.00	Slope	0.00
				Low strength	0.00	Too clayey	0.00
				Shrink-swell	0.23	Hard to reclaim	0.95
				Stone content	0.97	Rock fragments	0.95

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
42:							
Cochetopa	50	Fair		Poor		Fair	
		Too clayey	0.08	Low strength	0.00	Too clayey	0.06
		Low content of organic matter	0.88	Shrink-swell	0.38	Slope	0.96
Jerry	35	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Low content of organic matter	0.50	Shrink-swell	0.12	Slope	0.96
		Stone content	0.91	Stone content	0.79		
43:							
Coldspring, moist	80	Fair		Fair		Fair	
		Low content of organic matter	0.88	Depth to bedrock	0.29	Hard to reclaim	0.95
44:							
Cowestglen	80	Fair		Good		Fair	
		Low content of organic matter	0.88			Sodium content	0.98
		Sodium content	0.97				
45:							
Coyet	90	Poor		Good		Fair	
		Wind erosion	0.00			Too sandy	0.02
		Too sandy	0.02				
		Low content of organic matter	0.12				
		Droughty	0.90				
46:							
Coyet	85	Poor		Fair		Poor	
		Wind erosion	0.00	Slope	0.68	Slope	0.00
		Too sandy	0.02			Too sandy	0.02
		Low content of organic matter	0.12				
		Droughty	0.90				
47:							
Coyet	45	Poor		Poor		Poor	
		Too sandy	0.00	Slope	0.00	Slope	0.00
		Wind erosion	0.00	Depth to bedrock	0.39	Too sandy	0.00
		Low content of organic matter	0.12				
		Droughty	0.32				
Crestman, moist	35	Poor		Poor		Poor	
		Wind erosion	0.00	Depth to bedrock	0.00	Slope	0.00
		Droughty	0.00	Slope	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00			Rock fragments	0.00
		Too sandy	0.02			Too sandy	0.02
		Low content of organic matter	0.12				

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
48:							
Crago	35	Poor		Poor		Poor	
		Carbonate content	0.00	Slope	0.00	Slope	0.00
		Low content of organic matter	0.12	Cobble content	0.86	Hard to reclaim	0.00
						Rock fragments	0.00
		Droughty	0.37			Carbonate content	0.00
Pensore	35	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Carbonate content	0.00
		Carbonate content	0.00	Slope	0.00	Rock fragments	0.00
		Depth to bedrock	0.00			Depth to bedrock	0.00
		Low content of organic matter	0.12			Slope	0.00
Grapit	15	Poor		Poor		Poor	
		Carbonate content	0.00	Slope	0.00	Hard to reclaim	0.00
		Stone content	0.57	Stone content	0.61	Rock fragments	0.00
		Low content of organic matter	0.88	Cobble content	0.97	Slope	0.00
						Carbonate content	0.00
49:							
Cryoborolls, slumped	85	Poor		Poor		Poor	
		Too clayey	0.00	Slope	0.00	Slope	0.00
				Low strength	0.78	Too clayey	0.00
				Shrink-swell	0.87		
50:							
Cushool	85	Fair		Poor		Fair	
		Low content of organic matter	0.12	Depth to bedrock	0.00	Depth to bedrock	0.16
						Rock fragments	0.97
		Droughty	0.16				
		Depth to bedrock	0.16				
51:							
Cushool	85	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to bedrock	0.00	Slope	0.00
				Slope	0.68	Depth to bedrock	0.16
		Droughty	0.16			Rock fragments	0.97
		Depth to bedrock	0.16				
52:							
Danavore	45	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.03	Stone content	0.24	Slope	0.00
		Stone content	0.04	Slope	0.82	Depth to bedrock	0.03
		Low content of organic matter	0.12	Cobble content	0.94		
Waybe	30	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Low strength	0.00	Slope	0.00
		Too clayey	0.02	Shrink-swell	0.12	Too clayey	0.01
		Low content of organic matter	0.12	Slope	0.82	Rock fragments	0.72

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
53:							
Davtone	45	Fair		Fair		Poor	
		Low content of organic matter	0.50	Slope	0.02	Slope	0.00
		Too clayey	0.98			Hard to reclaim	0.24
						Too clayey	0.81
Forsey	30	Fair		Poor		Poor	
		Cobble content	0.04	Cobble content	0.00	Hard to reclaim	0.00
		Stone content	0.14	Slope	0.02	Rock fragments	0.00
		Droughty	0.19	Stone content	0.18	Slope	0.00
		Low content of organic matter	0.88				
54:							
Deaver	50	Poor		Poor		Poor	
		Too clayey	0.00	Depth to bedrock	0.00	Slope	0.00
		Low content of organic matter	0.12	Low strength	0.00	Too clayey	0.00
				Slope	0.00	Depth to bedrock	0.54
		Depth to bedrock	0.54	Slope	0.00	Sodium content	0.78
		Droughty	0.54	Shrink-swell	0.12	Rock fragments	0.97
		Sodium content	0.78				
Avalon	30	Fair		Good		Fair	
		Low content of organic matter	0.12			Rock fragments	0.28
						Too clayey	0.57
		Carbonate content	0.80			Slope	0.96
		Too clayey	0.98			Carbonate content	0.97
		Water erosion	0.99				
55:							
Deaver	60	Poor		Poor		Poor	
		Too clayey	0.00	Depth to bedrock	0.00	Too clayey	0.00
		Low content of organic matter	0.12	Low strength	0.00	Slope	0.00
				Shrink-swell	0.12	Sodium content	0.78
		Sodium content	0.78	Slope	0.68	Depth to bedrock	0.90
		Depth to bedrock	0.90			Rock fragments	0.97
		Droughty	0.93				
Chipeta	30	Poor		Poor		Poor	
		Too clayey	0.00	Depth to bedrock	0.00	Too clayey	0.00
		Droughty	0.00	Low strength	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Shrink-swell	0.12	Slope	0.00
		Low content of organic matter	0.12	Slope	0.68	Salinity	0.50
						Sodium content	0.60
		Sodium content	0.60				
		Water erosion	0.99				
56:							
Debone	90	Poor		Fair		Poor	
		Too alkaline	0.00	Shrink-swell	0.99	Sodium content	0.00
		Sodium content	0.00			Salinity	0.00
		Low content of organic matter	0.12				
		Salinity	0.88				
		Water erosion	0.90				
57:							
Detra	50	Good		Fair		Good	
				Shrink-swell	0.99		

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
57:							
Cortyzack	40	Fair		Good		Fair	
		Low content of organic matter	0.12			Carbonate content	0.80
		Carbonate content	0.80				
58:							
Diaflats	45	Fair		Poor		Fair	
		Low content of organic matter	0.12	Depth to bedrock	0.00	Rock fragments	0.12
		Depth to bedrock	0.21			Rock fragments	0.97
		Droughty	0.33			Slope	0.96
		Water erosion	0.90				
Fondillas	35	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Stone content	0.03	Depth to bedrock	0.00
		Stone content	0.00			Slope	0.96
		Low content of organic matter	0.50				
		Water erosion	0.99				
59:							
Dranyon	90	Fair		Good		Fair	
		Too acid	0.84			Hard to reclaim	0.18
		Low content of organic matter	0.88			Slope	0.37
						Rock fragments	0.97
60:							
Dumps, mine	100	Not rated		Not rated		Not rated	
61:							
Ecklund	50	Poor		Poor		Fair	
		Droughty	0.00	Depth to bedrock	0.00	Too sandy	0.07
		Too sandy	0.07			Depth to bedrock	0.93
		Low content of organic matter	0.12				
		Depth to bedrock	0.93				
Tipperary	40	Poor		Good		Fair	
		Wind erosion	0.00			Too sandy	0.36
		Low content of organic matter	0.12				
		Too sandy	0.36				
		Droughty	0.75				
62:							
Eghelm	90	Poor		Good		Good	
		Wind erosion	0.00				
		Low content of organic matter	0.12				
63:							
Eghelm, moist	90	Poor		Good		Good	
		Wind erosion	0.00				
		Low content of organic matter	0.12				
		Droughty	0.99				

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
64:							
Emlin	85	Fair		Good		Fair	
		Carbonate content	0.46			Carbonate content	0.46
		Low content of organic matter	0.50			Rock fragments	0.97
		Water erosion	0.99				
65:							
Emlin	65	Fair		Good		Good	
		Carbonate content	0.46				
		Low content of organic matter	0.50				
		Water erosion	0.99				
Tymosling	20	Poor		Poor		Poor	
		Too clayey	0.00	Depth to bedrock	0.00	Too clayey	0.00
		Low content of organic matter	0.12	Low strength	0.00	Slope	0.84
		Depth to bedrock	0.90	Shrink-swell	0.12	Depth to bedrock	0.90
		Droughty	0.95				
66:							
Evanot	90	Fair		Good		Fair	
		Low content of organic matter	0.12			Too clayey	0.55
		Water erosion	0.90			Hard to reclaim	0.88
		Too clayey	0.95				
67:							
Evanot	85	Fair		Fair		Poor	
		Low content of organic matter	0.12	Slope	0.68	Slope	0.00
		Water erosion	0.90			Too clayey	0.55
		Too clayey	0.95			Hard to reclaim	0.88
68:							
Evanot	50	Fair		Good		Fair	
		Low content of organic matter	0.12			Slope	0.37
		Water erosion	0.90			Too clayey	0.69
		Too clayey	0.95			Hard to reclaim	0.88
Yamo	25	Fair		Good		Fair	
		Low content of organic matter	0.12			Slope	0.37
		Water erosion	0.90				
69:							
Fenster	45	Poor		Fair		Good	
		Too alkaline	0.00	Low strength	0.78		
		Low content of organic matter	0.88				
		Water erosion	0.90				
Thenipel	30	Fair		Good		Good	
		Low content of organic matter	0.88				
		Water erosion	0.90				

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
70:							
Fluvaquents, frequently flooded	50	Fair		Poor		Poor	
		Low content of organic matter	0.12	Depth to saturated zone	0.00	Depth to saturated zone	0.00
				Cobble content	0.66	Hard to reclaim	0.00
						Rock fragments	0.00
Haplaquolls, frequently flooded	45	Fair		Poor		Poor	
		Low content of organic matter	0.88	Depth to saturated zone	0.00	Depth to saturated zone	0.00
						Hard to reclaim	0.00
71:							
Flygare, dry	85	Fair		Poor		Poor	
		Cobble content	0.78	Slope	0.00	Slope	0.00
		Too acid	0.84	Cobble content	0.54	Hard to reclaim	0.00
		Low content of organic matter	0.88	Stone content	0.97		
		Stone content	0.94				
72:							
Foidel, cool	85	Fair		Poor		Fair	
		Too acid	0.84	Low strength	0.00	Slope	0.04
				Shrink-swell	0.99		
73:							
Foidel	85	Fair		Poor		Poor	
		Too acid	0.84	Slope	0.00	Slope	0.00
				Low strength	0.00		
				Shrink-swell	0.99		
74:							
Foidel, moist	35	Fair		Poor		Fair	
		Too acid	0.84	Low strength	0.00	Slope	0.04
		Low content of organic matter	0.88	Shrink-swell	0.97		
Flygare	30	Fair		Fair		Poor	
		Cobble content	0.78	Cobble content	0.54	Hard to reclaim	0.00
		Too acid	0.84	Stone content	0.97	Slope	0.04
		Low content of organic matter	0.88				
		Stone content	0.94				
Skyway, moist	20	Fair		Poor		Fair	
		Droughty	0.23	Depth to bedrock	0.00	Slope	0.04
		Depth to bedrock	0.65			Depth to bedrock	0.65
75:							
Fonce	90	Fair		Good		Poor	
		Low content of organic matter	0.12			Rock fragments	0.00
						Hard to reclaim	0.32
		Droughty	0.20			Carbonate content	0.46
		Carbonate content	0.46				

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
76:							
Fonce	90	Fair		Good		Poor	
		Low content of organic matter	0.12			Hard to reclaim	0.00
		Carbonate content	0.46			Rock fragments	0.50
		Droughty	0.56				
77:							
Forelle	85	Fair		Good		Good	
		Low content of organic matter	0.12				
		Water erosion	0.99				
78:							
Forelle	85	Fair		Fair		Poor	
		Low content of organic matter	0.12	Slope	0.68	Slope	0.00
		Water erosion	0.99				
79:							
Forelle	50	Fair		Good		Good	
		Low content of organic matter	0.12				
		Water erosion	0.99				
Evanot	40	Fair		Good		Fair	
		Low content of organic matter	0.12			Too clayey	0.55
		Water erosion	0.90			Hard to reclaim	0.88
		Too clayey	0.95				
80:							
Forelle	50	Fair		Fair		Poor	
		Low content of organic matter	0.12	Slope	0.68	Slope	0.00
		Water erosion	0.99				
Evanot	40	Fair		Fair		Poor	
		Low content of organic matter	0.12	Slope	0.68	Slope	0.00
		Water erosion	0.90			Too clayey	0.55
		Too clayey	0.95			Hard to reclaim	0.88
81:							
Forelle	40	Fair		Good		Good	
		Low content of organic matter	0.12				
		Water erosion	0.99				
Obadia	35	Poor		Poor		Poor	
		Sodium content	0.00	Low strength	0.00	Sodium content	0.00
		Too alkaline	0.00	Shrink-swell	0.35	Too clayey	0.06
		Too clayey	0.08				
		Low content of organic matter	0.88				

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
82:							
Forelle	30	Fair		Good		Fair	
		Low content of organic matter	0.12			Slope	0.16
		Water erosion	0.99				
Pinelli	30	Fair		Fair		Fair	
		Low content of organic matter	0.12	Low strength	0.22	Slope	0.16
		Too clayey	0.50	Shrink-swell	0.87	Too clayey	0.29
		Water erosion	0.99				9
Maysprings	15	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Slope	0.16
		Low content of organic matter	0.12			Rock fragments	0.72
		Droughty	0.48				
83:							
Forsey	50	Fair		Poor		Poor	
		Cobble content	0.04	Cobble content	0.00	Hard to reclaim	0.00
		Stone content	0.14	Stone content	0.18	Rock fragments	0.00
		Droughty	0.19			Slope	0.04
		Low content of organic matter	0.88				
Libeg	30	Fair		Fair		Poor	
		Low content of organic matter	0.12	Cobble content	0.78	Hard to reclaim	0.00
		Cobble content	0.87			Rock fragments	0.00
		Droughty	0.90			Slope	0.96
84:							
Gebson, moist	55	Fair		Fair		Poor	
		Low content of organic matter	0.12			Slope	0.00
						Rock fragments	0.88
Youga	35	Fair		Good		Fair	
		Low content of organic matter	0.12			Slope	0.84
						Rock fragments	0.97
85:							
Giarch	90	Poor		Fair		Poor	
		Salinity	0.00	Low strength	0.22	Sodium content	0.00
		Sodium content	0.00	Shrink-swell	0.79	Salinity	0.00
		Too alkaline	0.00				
		Low content of organic matter	0.88				
86:							
Gracot	50	Poor		Fair		Poor	
		Too sandy	0.00	Slope	0.82	Too sandy	0.00
		Low content of organic matter	0.12			Slope	0.00
		Droughty	0.13				

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
86:							
Maybell	30	Poor		Fair		Poor	
		Too sandy	0.00	Slope	0.82	Too sandy	0.00
		Wind erosion	0.00			Slope	0.00
		Low content of organic matter	0.12				
		Droughty	0.79				
87:							
Gretdivid	35	Poor		Fair		Poor	
		Too sandy	0.00	Slope	0.50	Too sandy	0.00
		Wind erosion	0.00			Slope	0.00
		Droughty	0.05			Rock fragments	0.03
		Low content of organic matter	0.12			Hard to reclaim	0.98
Taffom	25	Fair		Fair		Poor	
		Low content of organic matter	0.12	Slope	0.50	Slope	0.00
Abor	15	Poor		Poor		Poor	
		Too clayey	0.00	Depth to bedrock	0.00	Too clayey	0.00
		Depth to bedrock	0.54	Low strength	0.00	Slope	0.00
		Droughty	0.54	Shrink-swell	0.12	Depth to bedrock	0.54
		Low content of organic matter	0.88	Slope	0.50		
88:							
Grieves	85	Poor		Good		Fair	
		Wind erosion	0.00			Too sandy	0.99
		Low content of organic matter	0.12				
		Too sandy	0.99				
89:							
Grieves	85	Poor		Fair		Poor	
		Wind erosion	0.00	Slope	0.68	Slope	0.00
		Low content of organic matter	0.12			Too sandy	0.99
		Too sandy	0.99				
90:							
Grieves	45	Poor		Fair		Poor	
		Wind erosion	0.00	Slope	0.50	Slope	0.00
		Low content of organic matter	0.12			Too sandy	0.99
		Too sandy	0.99				
Crestman	35	Poor		Poor		Poor	
		Wind erosion	0.00	Depth to bedrock	0.00	Slope	0.00
		Droughty	0.00	Slope	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00			Rock fragments	0.00
		Too sandy	0.02			Too sandy	0.02
		Low content of organic matter	0.12				

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
91:							
Grieves	40	Poor		Good		Poor	
		Wind erosion	0.00			Slope	0.00
		Low content of organic matter	0.12				
Yamo	25	Fair		Good		Fair	
		Low content of organic matter	0.12			Slope	0.96
Crestman	20	Poor		Poor		Poor	
		Wind erosion	0.00	Depth to bedrock	0.00	Slope	0.00
		Droughty	0.00	Slope	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00			Rock fragments	0.00
		Too sandy	0.02			Too sandy	0.02
		Low content of organic matter	0.12				
92:							
Grimm	50	Poor		Poor		Poor	
		Too sandy	0.00	Cobble content	0.00	Slope	0.00
		Droughty	0.00	Slope	0.00	Too sandy	0.00
		Cobble content	0.18			Hard to reclaim	0.00
		Low content of organic matter	0.88			Rock fragments	0.00
Ustic Torriorthents, shallow	40	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
		Low content of organic matter	0.88	Cobble content	0.96	Rock fragments	0.95
93:							
Gullied land	85	Not rated		Not rated		Not rated	
94:							
Hapney, moist	90	Poor		Poor		Poor	
		Sodium content	0.00	Low strength	0.00	Sodium content	0.00
		Too alkaline	0.00	Shrink-swell	0.82	Salinity	0.00
		Low content of organic matter	0.12			Too clayey	0.44
		Salinity	0.50				
		Too clayey	0.76				
95:							
Haterton	60	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00			Rock fragments	0.00
		Low content of organic matter	0.12			Sodium content	0.78
		Sodium content	0.78				
		Water erosion	0.99				

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
95:							
Piezon	30	Fair		Poor		Fair	
		Depth to bedrock	0.05	Depth to bedrock	0.00	Depth to bedrock	0.05
		Droughty	0.25			Carbonate content	0.92
		Low content of organic matter	0.88				
		Carbonate content	0.92				
		Water erosion	0.99				
96:							
Heathcoat	85	Fair		Fair		Fair	
		Too clayey	0.08	Stone content	0.83	Too clayey	0.06
		Carbonate content	0.68				
		Low content of organic matter	0.88				
		Stone content	0.97				
97:							
Heathcoat	60	Fair		Poor		Fair	
		Too clayey	0.08	Low strength	0.00	Too clayey	0.06
		Carbonate content	0.68	Shrink-swell	0.87	Slope	0.16
		Low content of organic matter	0.88			Carbonate content	0.68
Clayburn	25	Fair		Fair		Poor	
		Too clayey	0.98	Low strength	0.22	Slope	0.00
				Slope	0.50	Too clayey	0.86
				Shrink-swell	0.99		
98:							
Herm	50	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Low content of organic matter	0.50	Stone content	0.13	Slope	0.00
		Stone content	0.64	Shrink-swell	0.22		
Fughes	35	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Stone content	0.34	Stone content	0.00	Slope	0.00
				Shrink-swell	0.38	Hard to reclaim	0.68
						Rock fragments	0.68
99:							
Hesperus, dry	85	Fair		Poor		Fair	
		Low content of organic matter	0.88	Low strength	0.00	Too clayey	0.70
		Too clayey	0.98	Shrink-swell	0.99	Slope	0.96
100:							
Hesperus	90	Fair		Poor		Poor	
		Low content of organic matter	0.88	Slope	0.00	Slope	0.00
		Too clayey	0.98	Low strength	0.00	Too clayey	0.70
				Shrink-swell	0.98		
101:							
Hesperus	90	Fair		Poor		Fair	
		Low content of organic matter	0.88	Low strength	0.00	Slope	0.04
		Too clayey	0.98	Shrink-swell	0.98	Too clayey	0.70

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
102:							
Holter	55	Poor		Poor		Poor	
		Stone content	0.00	Stone content	0.00	Rock fragments	0.00
		Low content of organic matter	0.50	Slope	0.82	Hard to reclaim	0.00
		Droughty	0.65	Cobble content	0.83	Slope	0.00
Detra	30	Fair		Good		Poor	
		Low content of organic matter	0.88			Hard to reclaim	0.00
		Too clayey	0.98			Too clayey	0.86
103:							
Iles	85	Fair		Fair		Fair	
		Carbonate content	0.01	Shrink-swell	0.94	Too clayey	0.06
		Too clayey	0.08				
		Low content of organic matter	0.12				
		Water erosion	0.90				
104:							
Ironco	60	Poor		Poor		Poor	
		Stone content	0.00	Slope	0.00	Slope	0.00
		Droughty	0.66	Stone content	0.00	Rock fragments	0.00
				Cobble content	0.88	Hard to reclaim	0.12
Mulgon, dry	25	Poor		Poor		Poor	
		Stone content	0.00	Slope	0.00	Slope	0.00
		Low content of organic matter	0.50	Stone content	0.00	Rock fragments	0.00
		Droughty	0.57	Cobble content	0.73	Hard to reclaim	0.00
		Too acid	0.84				
105:							
Ironsprings	85	Poor		Good		Good	
		Wind erosion	0.00				
		Droughty	0.83				
		Low content of organic matter	0.88				
106:							
Ironsprings	85	Poor		Fair		Poor	
		Wind erosion	0.00	Slope	0.08	Slope	0.00
		Droughty	0.81				
		Low content of organic matter	0.88				
107:							
Ironsprings	40	Poor		Good		Poor	
		Wind erosion	0.00			Slope	0.00
		Droughty	0.76				
		Low content of organic matter	0.88				
Maysprings	25	Poor		Good		Poor	
		Wind erosion	0.00			Slope	0.00
		Low content of organic matter	0.12				
		Droughty	0.97				

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
107:							
Gretdivid	15	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Slope	0.00
		Droughty	0.05			Rock fragments	0.03
		Low content of organic matter	0.12			Hard to reclaim	0.98
108:							
Jerry	50	Fair		Poor		Poor	
		Low content of organic matter	0.50	Low strength	0.00	Slope	0.00
				Shrink-swell	0.32	Too clayey	0.67
		Too clayey	0.68	Slope	0.50		
		Too acid	0.84				
Cochetopa	35	Fair		Poor		Poor	
		Too clayey	0.08	Low strength	0.00	Slope	0.00
		Low content of organic matter	0.88	Shrink-swell	0.38	Too clayey	0.06
				Slope	0.50		
109:							
Joebas	60	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00			Rock fragments	0.00
						Slope	0.00
Rock outcrop	30	Not rated		Not rated		Not rated	
110:							
Kemmerer	80	Poor		Poor		Poor	
		Too clayey	0.00	Depth to bedrock	0.00	Too clayey	0.00
		Depth to bedrock	0.03	Low strength	0.00	Slope	0.00
		Droughty	0.10	Shrink-swell	0.12	Depth to bedrock	0.03
		Low content of organic matter	0.12	Slope	0.68		
111:							
Kemmerer	50	Poor		Poor		Poor	
		Too clayey	0.00	Depth to bedrock	0.00	Slope	0.00
		Droughty	0.11	Slope	0.00	Too clayey	0.00
		Low content of organic matter	0.12	Low strength	0.00	Depth to bedrock	0.26
				Shrink-swell	0.12		
		Depth to bedrock	0.26				
Grapit	35	Poor		Poor		Poor	
		Carbonate content	0.00	Slope	0.00	Slope	0.00
		Stone content	0.50	Stone content	0.50	Carbonate content	0.00
		Low content of organic matter	0.88	Cobble content	0.91	Hard to reclaim	0.00
						Rock fragments	0.00
		Droughty	0.99				
112:							
Kemmerer	45	Poor		Poor		Poor	
		Too clayey	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.03	Low strength	0.00	Too clayey	0.00
		Droughty	0.10	Slope	0.00	Depth to bedrock	0.03
		Low content of organic matter	0.12	Shrink-swell	0.12		

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
112:							
Moyerson	40	Poor		Poor		Poor	
		Too clayey	0.00	Depth to bedrock	0.00	Slope	0.00
		Droughty	0.00	Low strength	0.00	Too clayey	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
		Low content of organic matter	0.88	Shrink-swell	0.12	Salinity	0.88
						Rock fragments	0.95
113:							
Kemmerer	60	Poor		Poor		Poor	
		Too clayey	0.00	Depth to bedrock	0.00	Too clayey	0.00
		Depth to bedrock	0.03	Low strength	0.00	Slope	0.00
		Droughty	0.10	Shrink-swell	0.12	Depth to bedrock	0.03
		Low content of organic matter	0.12	Slope	0.82		
Yamo	20	Fair		Fair		Poor	
		Low content of organic matter	0.12	Slope	0.82	Slope	0.00
		Water erosion	0.90				
114:							
Lamphier	85	Fair		Good		Fair	
		Too acid	0.84			Slope	0.04
		Low content of organic matter	0.88			Rock fragments	0.97
115:							
Lamphier	85	Fair		Poor		Poor	
		Too acid	0.84	Slope	0.00	Slope	0.00
		Low content of organic matter	0.88			Rock fragments	0.97
116:							
Lamphier	45	Fair		Good		Fair	
		Too acid	0.84			Slope	0.04
		Low content of organic matter	0.88			Rock fragments	0.97
Jerry	30	Fair		Poor		Fair	
		Too clayey	0.08	Low strength	0.00	Slope	0.04
		Low content of organic matter	0.50	Shrink-swell	0.26	Too clayey	0.05
117:							
Lamphier	45	Fair		Poor		Poor	
		Too acid	0.84	Slope	0.00	Slope	0.00
		Low content of organic matter	0.88			Rock fragments	0.97
Jerry	30	Fair		Poor		Poor	
		Too clayey	0.08	Slope	0.00	Slope	0.00
		Low content of organic matter	0.50	Low strength	0.00	Too clayey	0.05
				Shrink-swell	0.26		
118:							
Lander	85	Fair		Fair		Good	
		Low content of organic matter	0.88	Shrink-swell	0.98		

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
119:							
Langspring----------	85	Poor		Good		Good	
		Too alkaline	0.00				
		Low content of organic matter	0.12				
		Carbonate content	0.46				
120:							
Layoint----------	35	Poor		Poor		Fair	
		Wind erosion	0.00	Depth to bedrock	0.00	Too sandy	0.03
		Too sandy	0.03			Depth to bedrock	0.71
		Droughty	0.07				
		Depth to bedrock	0.71				
		Low content of organic matter	0.88				
Moosed----------	25	Poor		Poor		Poor	
		Wind erosion	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Droughty	0.00			Too sandy	0.51
		Depth to bedrock	0.00			Slope	0.63
		Too sandy	0.51				
		Low content of organic matter	0.88				
Berlake----------	20	Fair		Good		Good	
		Low content of organic matter	0.88				
121:							
Leaps----------	90	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Too acid	0.84	Shrink-swell	0.18	Hard to reclaim	0.95
		Low content of organic matter	0.88			Rock fragments	0.95
						Slope	0.96
122:							
Leswill----------	50	Poor		Poor		Poor	
		Sodium content	0.00	Low strength	0.00	Sodium content	0.00
		Low content of organic matter	0.12			Salinity	0.00
						Too clayey	0.57
		Salinity	0.50				
		Too clayey	0.98				
		Water erosion	0.99				
Rogrube----------	30	Fair		Good		Fair	
		Low content of organic matter	0.12			Salinity	0.50
						Too clayey	0.57
		Carbonate content	0.68			Carbonate content	0.68
		Sodium content	0.90			Sodium content	0.90
		Too clayey	0.98				
		Water erosion	0.99				

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
123:							
Lilsnake	45	Poor		Poor		Poor	
		Depth to bedrock	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Droughty	0.00			Carbonate content	0.00
		Carbonate content	0.00			Slope	0.37
		Low content of organic matter	0.12				
		Water erosion	0.90				
Sandwash	30	Poor		Poor		Poor	
		Carbonate content	0.00	Depth to bedrock	0.00	Carbonate content	0.00
		Droughty	0.11	Cobble content	0.02	Rock fragments	0.00
		Low content of organic matter	0.12			Depth to bedrock	0.90
		Cobble content	0.56				
		Depth to bedrock	0.90				
		Water erosion	0.99				
124:							
Losee	45	Poor		Poor		Poor	
		Stone content	0.00	Slope	0.00	Slope	0.00
		Low content of organic matter	0.12	Stone content	0.00	Hard to reclaim	0.00
		Droughty	0.55	Cobble content	0.50	Rock fragments	0.00
Thornburgh, dry	30	Fair		Poor		Poor	
		Stone content	0.01	Slope	0.00	Slope	0.00
		Cobble content	0.34	Cobble content	0.00	Rock fragments	0.00
		Droughty	0.55	Stone content	0.00	Hard to reclaim	0.00
125:							
Massadona	85	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Low content of organic matter	0.12	Shrink-swell	0.12		
		Water erosion	0.99				
126:							
Massadona	65	Fair		Poor		Fair	
		Too clayey	0.08	Low strength	0.00	Too clayey	0.05
		Low content of organic matter	0.12	Shrink-swell	0.12		
		Water erosion	0.90				
Youngston, moist	20	Fair		Poor		Fair	
		Low content of organic matter	0.88	Low strength	0.00	Salinity	0.88
		Sodium content	0.90	Shrink-swell	0.87	Sodium content	0.90
		Water erosion	0.99				
127:							
Maudlin	50	Fair		Poor		Fair	
		Droughty	0.40	Depth to bedrock	0.00	Depth to bedrock	0.54
		Depth to bedrock	0.54			Slope	0.96
		Too sandy	0.99			Too sandy	0.99

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
127:							
Duffymont	30	Poor		Poor		Poor	
		Stone content	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Droughty	0.00	Stone content	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Cobble content	0.94	Slope	0.96
128:							
Maybell	90	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00				
		Low content of organic matter	0.12				
		Droughty	0.81				
129:							
Maybell	90	Poor		Poor		Poor	
		Too sandy	0.00	Slope	0.00	Too sandy	0.00
		Wind erosion	0.00			Slope	0.00
		Low content of organic matter	0.12				
		Droughty	0.79				
130:							
Maysprings	85	Fair		Good		Good	
		Low content of organic matter	0.12				
		Droughty	0.91				
131:							
Maysprings	50	Poor		Good		Poor	
		Wind erosion	0.00			Slope	0.00
		Low content of organic matter	0.12				
		Droughty	0.81				
Gretdivid	30	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Slope	0.00
		Droughty	0.05			Rock fragments	0.03
		Low content of organic matter	0.12			Hard to reclaim	0.98
132:							
Milren	80	Fair		Poor		Fair	
		Too clayey	0.08	Low strength	0.00	Too clayey	0.05
		Low content of organic matter	0.12	Shrink-swell	0.12		
133:							
Miracle	50	Fair		Poor		Fair	
		Droughty	0.96	Depth to bedrock	0.00	Depth to bedrock	0.97
		Depth to bedrock	0.97				
Coldspring	30	Fair		Fair		Fair	
		Low content of organic matter	0.88	Depth to bedrock	0.29	Hard to reclaim	0.95

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
134:							
Morapos	85	Fair		Poor		Fair	
		Too clayey	0.08	Low strength	0.00	Too clayey	0.06
		Low content of organic matter	0.88	Shrink-swell	0.12		
135:							
Morapos	85	Fair		Poor		Poor	
		Too clayey	0.08	Low strength	0.00	Slope	0.00
		Low content of organic matter	0.88	Shrink-swell	0.12	Too clayey	0.06
				Slope	0.68		
136:							
Morapos	40	Fair		Poor		Fair	
		Too clayey	0.05	Low strength	0.00	Too clayey	0.03
		Low content of organic matter	0.88	Shrink-swell	0.12		
Pagoda	40	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Low content of organic matter	0.12	Shrink-swell	0.79		
137:							
Morset	50	Fair		Good		Fair	
		Carbonate content	0.20			Carbonate content	0.20
		Low content of organic matter	0.88				
Youga	30	Fair		Good		Fair	
		Low content of organic matter	0.12			Rock fragments	0.97
138:							
Moyerson	50	Poor		Poor		Poor	
		Too clayey	0.00	Depth to bedrock	0.00	Slope	0.00
		Droughty	0.00	Low strength	0.00	Too clayey	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
		Low content of organic matter	0.88	Shrink-swell	0.12	Salinity	0.88
						Rock fragments	0.95
Rentsac	30	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Rock fragments	0.00
		Low content of organic matter	0.12	Cobble content	0.93	Depth to bedrock	0.00
		Cobble content	0.99				
139:							
Muggins	85	Fair		Poor		Poor	
		Too acid	0.84	Low strength	0.00	Rock fragments	0.00
		Low content of organic matter	0.88	Shrink-swell	0.53	Slope	0.37

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
140:							
Ninot	50	Poor		Poor		Poor	
		Carbonate content	0.00	Slope	0.00	Slope	0.00
		Low content of organic matter	0.88			Rock fragments	0.00
						Carbonate content	0.00
						Hard to reclaim	0.68
Crago	20	Poor		Poor		Poor	
		Carbonate content	0.00	Slope	0.00	Slope	0.00
		Low content of organic matter	0.12	Cobble content	0.71	Hard to reclaim	0.00
		Droughty	0.40			Rock fragments	0.00
		Cobble content	0.99			Carbonate content	0.00
Garlips	15	Fair		Poor		Poor	
		Carbonate content	0.68	Slope	0.00	Slope	0.00
		Low content of organic matter	0.88	Shrink-swell	0.87	Rock fragments	0.50
						Carbonate content	0.68
141:							
Nortez, cool	50	Fair		Poor		Fair	
		Too clayey	0.08	Depth to bedrock	0.00	Too clayey	0.06
		Depth to bedrock	0.54	Low strength	0.00	Depth to bedrock	0.54
		Droughty	0.86	Shrink-swell	0.12		
		Low content of organic matter	0.88				
Morapos	40	Fair		Poor		Fair	
		Too clayey	0.08	Low strength	0.00	Too clayey	0.06
		Low content of organic matter	0.88	Shrink-swell	0.12		
142:							
Nortez, cool	50	Fair		Poor		Poor	
		Too clayey	0.08	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.54	Low strength	0.00	Too clayey	0.06
		Droughty	0.86	Shrink-swell	0.12	Depth to bedrock	0.54
		Low content of organic matter	0.88	Slope	0.68		
Morapos	40	Fair		Poor		Poor	
		Too clayey	0.08	Low strength	0.00	Slope	0.00
		Low content of organic matter	0.88	Shrink-swell	0.12	Too clayey	0.06
				Slope	0.68		
143:							
Nunemaker	90	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Low content of organic matter	0.88	Shrink-swell	0.57	Hard to reclaim	0.98
144:							
Pagoda	85	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Slope	0.00
		Low content of organic matter	0.12	Slope	0.68	Too clayey	0.00
				Shrink-swell	0.86		

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
145:							
Pagoda	85	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Low content of organic matter	0.12	Shrink-swell	0.86		
146:							
Pavillion	60	Fair		Poor		Fair	
		Low content of organic matter	0.12	Depth to bedrock	0.00	Slope	0.37
		Water erosion	0.90	Low strength	0.22	Depth to bedrock	0.93
		Depth to bedrock	0.93	Shrink-swell	0.87		
Degater	25	Poor		Poor		Poor	
		Too clayey	0.00	Depth to bedrock	0.00	Too clayey	0.00
		Low content of organic matter	0.12	Low strength	0.00	Slope	0.37
		Droughty	0.29	Shrink-swell	0.12	Depth to bedrock	0.54
		Depth to bedrock	0.54				
147:							
Peeler	85	Fair		Fair		Poor	
		Low content of organic matter	0.12	Cobble content	0.99	Slope	0.00
		Too acid	0.84	Shrink-swell	0.99	Rock fragments	0.02
						Hard to reclaim	0.98
148:							
Pilotpeak	45	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00			Depth to bedrock	0.00
		Low content of organic matter	0.12			Carbonate content	0.46
		Carbonate content	0.46				
Grubrob	35	Fair		Poor		Fair	
		Droughty	0.07	Depth to bedrock	0.00	Depth to bedrock	0.35
		Depth to bedrock	0.35				
		Carbonate content	0.80				
		Low content of organic matter	0.88				
149:							
Pinelli	85	Fair		Fair		Fair	
		Low content of organic matter	0.12	Low strength	0.22	Too clayey	0.29
		Too clayey	0.50	Shrink-swell	0.87		
		Water erosion	0.99				
150:							
Pinelli	85	Fair		Fair		Fair	
		Low content of organic matter	0.12	Low strength	0.22	Too clayey	0.48
		Too clayey	0.82	Shrink-swell	0.87	Slope	0.96

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
151:							
Pinelli, dry--------	85	Fair		Fair		Fair	
		Low content of organic matter	0.12	Low strength	0.22	Too clayey	0.29
				Shrink-swell	0.87		
		Too clayey	0.50				
		Water erosion	0.99				
152:							
Pinridge----------	85	Good		Good		Good	
153:							
Pricecreek----------	85	Poor		Poor		Fair	
		Too alkaline	0.00	Low strength	0.00	Too clayey	0.06
		Too clayey	0.08	Shrink-swell	0.12	Sodium content	0.98
		Low content of organic matter	0.12				
		Sodium content	0.97				
154:							
Quealman----------	90	Poor		Good		Good	
		Wind erosion	0.00				
		Low content of organic matter	0.88				
155:							
Rencot----------	50	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Cobble content	0.00	Depth to bedrock	0.00
		Cobble content	0.00			Slope	0.16
		Low content of organic matter	0.12			Carbonate content	0.46
		Carbonate content	0.46				
Duffymont----------	30	Poor		Poor		Poor	
		Stone content	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Droughty	0.00	Stone content	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Cobble content	0.95	Slope	0.16
156:							
Rentsac----------	85	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Rock fragments	0.00
		Low content of organic matter	0.12	Cobble content	0.97	Depth to bedrock	0.00
157:							
Rentsac----------	40	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Rock fragments	0.00
		Low content of organic matter	0.12	Cobble content	0.90	Depth to bedrock	0.00
		Cobble content	0.97				
Moyerson----------	35	Poor		Poor		Poor	
		Too clayey	0.00	Depth to bedrock	0.00	Slope	0.00
		Droughty	0.00	Slope	0.00	Too clayey	0.00
		Depth to bedrock	0.00	Low strength	0.00	Depth to bedrock	0.00
		Low content of organic matter	0.88	Shrink-swell	0.12	Salinity	0.88
						Rock fragments	0.95

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
158:							
Rock outcrop--------	70	Not rated		Not rated		Not rated	
Earsman----------	20	Poor		Poor		Poor	
		Stone content	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Droughty	0.00	Stone content	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Slope	0.00	Slope	0.00
		Low content of organic matter	0.88	Cobble content	0.95		
159:							
Rock outcrop--------	50	Not rated		Not rated		Not rated	
Haploborolls--------	35	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.10	Slope	0.00	Depth to bedrock	0.10
		Low content of organic matter	0.88	Stone content	0.99	Rock fragments	0.12
		Stone content	0.96				
160:							
Rock outcrop--------	70	Not rated		Not rated		Not rated	
Torriorthents-------	25	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Rock fragments	0.00
		Stone content	0.00	Stone content	0.02	Depth to bedrock	0.00
		Low content of organic matter	0.88	Cobble content	0.93		
161:							
Rock River----------	85	Fair		Good		Good	
		Low content of organic matter	0.88				
162:							
Rock River----------	85	Fair		Good		Good	
		Low content of organic matter	0.88				
163:							
Rock River----------	85	Fair		Fair		Poor	
		Low content of organic matter	0.88	Slope	0.68	Slope	0.00
164:							
Rock River----------	50	Poor		Good		Fair	
		Wind erosion	0.00			Slope	0.37
		Low content of organic matter	0.88				
Taffom--------------	25	Fair		Good		Fair	
		Low content of organic matter	0.12			Slope	0.37

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
165:							
Rogrube sandy loam	50	Fair		Good		Fair	
		Low content of organic matter	0.12			Salinity	0.50
		Carbonate content	0.68			Too clayey	0.57
		Sodium content	0.90			Carbonate content	0.68
		Too clayey	0.98			Sodium content	0.90
		Water erosion	0.99				
Rogrube clay loam	25	Fair		Good		Fair	
		Low content of organic matter	0.12			Salinity	0.50
		Carbonate content	0.68			Too clayey	0.57
		Sodium content	0.90			Carbonate content	0.68
		Too clayey	0.98			Sodium content	0.90
		Water erosion	0.99				
166:							
Routt	80	Fair		Poor		Fair	
		Low content of organic matter	0.12	Low strength	0.00	Slope	0.04
		Too acid	0.84	Shrink-swell	0.99		
167:							
Routt	30	Fair		Poor		Poor	
		Low content of organic matter	0.12	Low strength	0.00	Slope	0.00
				Slope	0.50		
				Shrink-swell	0.98		
Cochetopa	25	Fair		Poor		Poor	
		Low content of organic matter	0.12	Low strength	0.00	Slope	0.00
				Shrink-swell	0.45		
				Slope	0.50		
Binco	20	Poor		Poor		Poor	
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Low content of organic matter	0.88	Shrink-swell	0.12	Slope	0.00
				Slope	0.50		
168:							
Ruedloff	85	Fair		Good		Fair	
		Too sandy	0.02			Too sandy	0.02
		Low content of organic matter	0.12				
		Droughty	0.38				
169:							
Ruedloff	60	Poor		Good		Poor	
		Wind erosion	0.00			Slope	0.00
		Low content of organic matter	0.12				
		Droughty	0.45				

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
169:							
Dunul	30	Poor		Fair		Poor	
		Droughty	0.00	Cobble content	0.99	Rock fragments	0.00
		Too sandy	0.09			Slope	0.00
		Low content of organic matter	0.12			Too sandy	0.09
						Hard to reclaim	0.32
170:							
Ryan Park	85	Poor		Good		Fair	
		Wind erosion	0.00			Slope	0.96
		Low content of organic matter	0.88				
171:							
Ryan Park	85	Fair		Good		Good	
		Low content of organic matter	0.88				
172:							
Ryan Park	50	Poor		Good		Poor	
		Wind erosion	0.00			Slope	0.00
		Low content of organic matter	0.88				
Coyet	30	Poor		Good		Poor	
		Wind erosion	0.00			Slope	0.00
		Too sandy	0.02			Too sandy	0.02
		Low content of organic matter	0.12				
		Droughty	0.90				
173:							
Ryark	65	Poor		Good		Fair	
		Wind erosion	0.00			Slope	0.96
		Droughty	0.45				
		Low content of organic matter	0.88				
Powderwash	20	Poor		Poor		Poor	
		Wind erosion	0.00	Depth to bedrock	0.00	Too clayey	0.00
		Too clayey	0.00	Low strength	0.00	Slope	0.96
		Low content of organic matter	0.12	Shrink-swell	0.80	Depth to bedrock	0.99
		Droughty	0.92				
		Depth to bedrock	0.99				
174:							
Ryark	70	Poor		Good		Good	
		Wind erosion	0.00				
		Droughty	0.45				
		Low content of organic matter	0.88				
Maybell	15	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00				
		Low content of organic matter	0.12				
		Droughty	0.81				

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
175:							
Sandwash	40	Poor		Poor		Poor	
		Carbonate content	0.00	Depth to bedrock	0.00	Carbonate content	0.00
		Droughty	0.00	Cobble content	0.97	Depth to bedrock	0.03
		Depth to bedrock	0.03			Rock fragments	0.03
		Low content of organic matter	0.12				
		Water erosion	0.99				
Langspring	30	Poor		Good		Fair	
		Too alkaline	0.00			Carbonate content	0.46
		Low content of organic matter	0.12			Rock fragments	0.97
		Carbonate content	0.46				
Baston	20	Poor		Poor		Poor	
		Sodium content	0.00	Depth to bedrock	0.00	Sodium content	0.00
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Too alkaline	0.00	Shrink-swell	0.12	Salinity	0.00
		Droughty	0.04			Depth to bedrock	0.35
		Depth to bedrock	0.35				
		Low content of organic matter	0.50				
		Salinity	0.88				
176:							
Schooner	50	Poor		Poor		Poor	
		Wind erosion	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Droughty	0.00	Slope	0.00	Slope	0.00
		Depth to bedrock	0.00			Too sandy	0.51
		Low content of organic matter	0.12			Rock fragments	0.97
		Too sandy	0.51				
Rock outcrop	35	Not rated		Not rated		Not rated	
177:							
Schooner	55	Poor		Poor		Poor	
		Wind erosion	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Droughty	0.00			Slope	0.00
		Depth to bedrock	0.00			Too sandy	0.51
		Low content of organic matter	0.12			Rock fragments	0.97
		Too sandy	0.51				
Tricera	25	Poor		Good		Fair	
		Wind erosion	0.00			Too sandy	0.03
		Too sandy	0.03			Slope	0.84
		Low content of organic matter	0.12				
		Droughty	0.83				
178:							
Simanni	50	Fair		Good		Good	
		Low content of organic matter	0.12				
		Droughty	0.96				

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
178:							
Ruedloff	40	Poor		Good		Good	
		Wind erosion	0.00				
		Low content of organic matter	0.12				
		Droughty	0.45				
179:							
Skyway, dry	85	Fair		Poor		Poor	
		Droughty	0.23	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.65	Slope	0.00	Depth to bedrock	0.65
180:							
Spool	55	Poor		Poor		Poor	
		Wind erosion	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Droughty	0.00	Slope	0.08	Slope	0.00
		Depth to bedrock	0.00			Too sandy	0.07
		Too sandy	0.07			Rock fragments	0.28
		Low content of organic matter	0.12				
Maybell	30	Poor		Good		Fair	
		Wind erosion	0.00			Too sandy	0.07
		Too sandy	0.07			Slope	0.84
		Low content of organic matter	0.12				
		Droughty	0.85				
181:							
Stunner	90	Fair		Good		Fair	
		Low content of organic matter	0.12			Rock fragments	0.28
		Carbonate content	0.32			Carbonate content	0.32
182:							
Stunner, moist	55	Fair		Good		Fair	
		Carbonate content	0.01			Carbonate content	0.01
		Low content of organic matter	0.12			Rock fragments	0.97
		Water erosion	0.99				
Emlin	35	Fair		Good		Fair	
		Carbonate content	0.46			Carbonate content	0.46
		Low content of organic matter	0.50			Rock fragments	0.97
		Water erosion	0.99				
183:							
Styers	45	Poor		Poor		Poor	
		Too clayey	0.00	Depth to bedrock	0.00	Too clayey	0.00
		Low content of organic matter	0.50	Low strength	0.00	Slope	0.00
		Depth to bedrock	0.90	Shrink-swell	0.12	Depth to bedrock	0.90
		Droughty	0.90				

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
183:							
Ironsprings	25	Poor		Good		Poor	
		Wind erosion	0.00			Slope	0.00
		Droughty	0.76				
		Low content of organic matter	0.88				
Maysprings	15	Poor		Good		Poor	
		Wind erosion	0.00			Slope	0.00
		Low content of organic matter	0.12				
		Droughty	0.67				
184:							
Styers	40	Poor		Poor		Poor	
		Too clayey	0.00	Depth to bedrock	0.00	Too clayey	0.00
		Depth to bedrock	0.35	Low strength	0.00	Slope	0.00
		Droughty	0.37	Shrink-swell	0.12	Depth to bedrock	0.35
		Low content of organic matter	0.50	Slope	0.82		
Pinelli	20	Poor		Fair		Poor	
		Too clayey	0.00	Low strength	0.22	Too clayey	0.00
		Low content of organic matter	0.12	Slope	0.82	Slope	0.00
				Shrink-swell	0.87		
Taffom	15	Fair		Fair		Poor	
		Low content of organic matter	0.12	Slope	0.82	Slope	0.00
185:							
Taffom	85	Fair		Good		Fair	
		Low content of organic matter	0.12			Slope	0.96
186:							
Talamantes	85	Fair		Good		Good	
		Low content of organic matter	0.50				
		Water erosion	0.99				
187:							
Talamantes	90	Fair		Good		Fair	
		Low content of organic matter	0.50			Slope	0.63
		Water erosion	0.99				
188:							
Talamantes, saline	85	Fair		Good		Poor	
		Low content of organic matter	0.50			Salinity	0.00
		Salinity	0.50			Too clayey	0.64
		Sodium content	0.90			Sodium content	0.90
		Too clayey	0.98				
		Water erosion	0.99				

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
189:							
Tipper	55	Poor		Poor		Poor	
		Wind erosion	0.00	Depth to bedrock	0.00	Slope	0.00
		Droughty	0.00	Slope	0.00	Too sandy	0.06
		Too sandy	0.06			Depth to bedrock	0.35
		Low content of organic matter	0.12			Rock fragments	0.97
		Depth to bedrock	0.35				
Crustown	35	Poor		Poor		Poor	
		Wind erosion	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Droughty	0.00	Slope	0.00	Slope	0.00
		Depth to bedrock	0.00			Too sandy	0.03
		Too sandy	0.03				
		Low content of organic matter	0.12				
190:							
Tipperary	90	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Slope	0.16
		Low content of organic matter	0.12				
		Droughty	0.70				
191:							
Tipperary	90	Poor		Good		Fair	
		Wind erosion	0.00			Too sandy	0.36
		Low content of organic matter	0.12				
		Too sandy	0.36				
		Droughty	0.75				
192:							
Tipperary	50	Poor		Good		Fair	
		Wind erosion	0.00			Too sandy	0.36
		Low content of organic matter	0.12				
		Too sandy	0.36				
		Droughty	0.75				
Willwood	40	Poor		Good		Poor	
		Wind erosion	0.00			Hard to reclaim	0.00
		Droughty	0.00			Rock fragments	0.00
		Too sandy	0.08			Too sandy	0.08
		Low content of organic matter	0.12				
193:							
Tisworth	85	Poor		Good		Poor	
		Sodium content	0.00			Salinity	0.00
		Too alkaline	0.00			Sodium content	0.00
		Low content of organic matter	0.12				
		Salinity	0.50				
		Droughty	0.91				
		Water erosion	0.99				

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
194:							
Tolman	50	Poor		Poor		Poor	
		Stone content	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Droughty	0.00	Stone content	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.50	Slope	0.00
				Cobble content	0.91		
Duffymont	35	Poor		Poor		Poor	
		Stone content	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Droughty	0.00	Stone content	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.50	Slope	0.00
				Cobble content	0.94		
195:							
Torriorthents	95	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Stone content	0.00	Slope	0.00
		Stone content	0.00	Slope	0.68	Rock fragments	0.50
		Sodium content	0.78			Sodium content	0.78
		Low content of organic matter	0.88				
196:							
Torriorthents	50	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Stone content	0.00	Rock fragments	0.50
		Stone content	0.00			Sodium content	0.78
		Sodium content	0.78				
		Low content of organic matter	0.88				
Baston	35	Poor		Poor		Poor	
		Sodium content	0.00	Depth to bedrock	0.00	Sodium content	0.00
		Too clayey	0.00	Low strength	0.00	Too clayey	0.00
		Too alkaline	0.00	Shrink-swell	0.12	Salinity	0.00
		Droughty	0.04			Depth to bedrock	0.35
		Depth to bedrock	0.35				
		Low content of organic matter	0.50				
		Salinity	0.88				
197:							
Torriorthents	60	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Rock fragments	0.00
		Stone content	0.00	Stone content	0.02	Depth to bedrock	0.00
		Low content of organic matter	0.88	Cobble content	0.93		
Rock outcrop, sandstone	30	Not rated		Not rated		Not rated	

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
198:							
Torriorthents-------	60	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
		Too clayey	0.76	Low strength	0.00	Salinity	0.00
		Sodium content	0.78			Too clayey	0.54
		Salinity	0.88			Sodium content	0.78
		Low content of organic matter	0.88				
Rock outcrop, shale--------------	40	Not rated		Not rated		Not rated	
199:							
Torriorthents-------	60	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Slope	0.00	Slope	0.00
		Too clayey	0.00	Shrink-swell	0.87	Too clayey	0.00
		Low content of organic matter	0.12				
Torripsamments------	30	Poor		Poor		Poor	
		Wind erosion	0.00	Depth to bedrock	0.00	Slope	0.00
		Droughty	0.00	Slope	0.00	Too sandy	0.01
		Too sandy	0.01			Rock fragments	0.12
		Depth to bedrock	0.21			Depth to bedrock	0.21
		Low content of organic matter	0.88				
200:							
Tresano-------------	80	Fair		Good		Good	
		Low content of organic matter	0.12				
201:							
Tresano-------------	35	Fair		Good		Good	
		Low content of organic matter	0.12				
		Water erosion	0.99				
Hiatha--------------	30	Poor		Poor		Poor	
		Too clayey	0.00	Depth to bedrock	0.00	Too clayey	0.00
		Droughty	0.00	Low strength	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Shrink-swell	0.12	Slope	0.16
		Low content of organic matter	0.12			Sodium content	0.98
		Sodium content	0.97				
Kandaly-------------	15	Poor		Good		Fair	
		Wind erosion	0.00			Too sandy	0.25
		Droughty	0.10			Sodium content	0.98
		Low content of organic matter	0.12				
		Too sandy	0.25				
		Sodium content	0.97				

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
202:							
Turzo	90	Fair		Fair		Good	
		Low content of organic matter	0.12	Low strength	0.78		
		Water erosion	0.90				
203:							
Turzo, saline	90	Poor		Good		Poor	
		Salinity	0.00			Salinity	0.00
		Too alkaline	0.00			Sodium content	0.02
		Sodium content	0.03				
		Low content of organic matter	0.12				
		Water erosion	0.90				
204:							
Typic Natrargids	80	Poor		Poor		Poor	
		Too alkaline	0.00	Low strength	0.00	Sodium content	0.00
		Sodium content	0.00	Shrink-swell	0.87	Salinity	0.00
		Low content of organic matter	0.50			Too clayey	0.54
		Too clayey	0.82				
		Salinity	0.88				
		Water erosion	0.99				
205:							
Uffens	90	Poor		Good		Poor	
		Too alkaline	0.00			Sodium content	0.00
		Sodium content	0.00			Salinity	0.50
		Low content of organic matter	0.12				
		Droughty	0.99				
206:							
Ustorthents, frigid	55	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Stone content	0.00	Slope	0.00	Rock fragments	0.00
		Cobble content	0.33	Stone content	0.00	Depth to bedrock	0.35
		Depth to bedrock	0.35	Cobble content	0.00		
		Low content of organic matter	0.88				
Borolls	35	Fair		Poor		Poor	
		Stone content	0.36	Depth to bedrock	0.00	Slope	0.00
		Droughty	0.52	Slope	0.00	Depth to bedrock	0.90
		Depth to bedrock	0.90	Stone content	0.36		
207:							
Vermillion	40	Fair		Poor		Poor	
		Droughty	0.03	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.35			Slope	0.04
		Carbonate content	0.46			Depth to bedrock	0.35
		Low content of organic matter	0.88			Carbonate content	0.46
		Water erosion	0.99				

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
207:							
Langspring----------	35	Poor		Good		Fair	
		Too alkaline	0.00			Slope	0.04
		Low content of organic matter	0.12				
		Carbonate content	0.46				
		Water erosion	0.99				
208:							
Wallson----------	50	Fair		Good		Fair	
		Low content of organic matter	0.12			Slope	0.96
Tricera----------	35	Poor		Good		Fair	
		Wind erosion	0.00			Too sandy	0.03
		Too sandy	0.03			Slope	0.96
		Low content of organic matter	0.12				
		Droughty	0.88				
209:							
Weed----------	85	Fair		Good		Good	
		Low content of organic matter	0.88				
210:							
Willwood----------	55	Poor		Poor		Poor	
		Too sandy	0.00	Cobble content	0.00	Too sandy	0.00
		Wind erosion	0.00	Stone content	0.82	Hard to reclaim	0.00
		Droughty	0.00			Rock fragments	0.00
		Cobble content	0.11				
		Low content of organic matter	0.12				
		Stone content	0.73				
Sheppard, cool------	35	Poor		Good		Fair	
		Wind erosion	0.00			Too sandy	0.16
		Low content of organic matter	0.12				
		Too sandy	0.16				
		Droughty	0.95				
211:							
Willwood----------	55	Poor		Poor		Poor	
		Too sandy	0.00	Cobble content	0.00	Too sandy	0.00
		Droughty	0.00	Slope	0.00	Hard to reclaim	0.00
		Low content of organic matter	0.12	Stone content	0.65	Rock fragments	0.00
						Slope	0.00
		Cobble content	0.14				
		Stone content	0.60				
Tipperary----------	35	Poor		Poor		Poor	
		Wind erosion	0.00	Slope	0.00	Slope	0.00
		Low content of organic matter	0.12			Too sandy	0.36
		Too sandy	0.36				
		Droughty	0.75				

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
212:							
Willwood	60	Poor		Poor		Poor	
		Too sandy	0.00	Cobble content	0.00	Too sandy	0.00
		Wind erosion	0.00	Stone content	0.88	Hard to reclaim	0.00
		Droughty	0.00			Rock fragments	0.00
		Low content of organic matter	0.12				
		Cobble content	0.18				
		Stone content	0.78				
Tipperary, cobbly substratum	25	Poor		Good		Poor	
		Wind erosion	0.00			Hard to reclaim	0.00
		Too sandy	0.09			Too sandy	0.09
		Low content of organic matter	0.50				
		Droughty	0.52				
213:							
Winevada	60	Fair		Poor		Fair	
		Depth to bedrock	0.16	Depth to bedrock	0.00	Slope	0.04
		Droughty	0.57			Depth to bedrock	0.16
Splitro	30	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00			Slope	0.04
		Too acid	0.84				
214:							
Winevada	60	Fair		Poor		Poor	
		Depth to bedrock	0.21	Depth to bedrock	0.00	Slope	0.00
		Droughty	0.52	Slope	0.00	Depth to bedrock	0.21
		Too acid	0.84				
Splitro	30	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
		Too acid	0.84				
215:							
Winkleman	85	Fair		Poor		Good	
		Low content of organic matter	0.12	Low strength	0.00		
				Shrink-swell	0.87		
216:							
Yamo	90	Fair		Good		Fair	
		Low content of organic matter	0.12			Slope	0.96
		Water erosion	0.90				
217:							
Yamo	90	Fair		Fair		Poor	
		Low content of organic matter	0.12	Slope	0.08	Slope	0.00
		Water erosion	0.90				

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
218:							
Yellowwash----------	50	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00			Rock fragments	0.00
		Low content of organic matter	0.88			Salinity	0.00
		Salinity	0.97			Slope	0.84
Piezon--------------	35	Fair		Poor		Fair	
		Depth to bedrock	0.54	Depth to bedrock	0.00	Depth to bedrock	0.54
		Low content of organic matter	0.88			Slope	0.84
		Carbonate content	0.92			Carbonate content	0.92
		Droughty	0.93				
		Water erosion	0.99				
219:							
Youga---------------	90	Fair		Poor		Fair	
		Too clayey	0.88	Low strength	0.00	Too clayey	0.63
		Low content of organic matter	0.88			Rock fragments	0.88
						Slope	0.96
220:							
Youga---------------	50	Fair		Good		Fair	
		Low content of organic matter	0.12			Rock fragments	0.97
Dinnen--------------	40	Fair		Good		Good	
		Low content of organic matter	0.88				
221:							
Youga---------------	40	Fair		Poor		Poor	
		Low content of organic matter	0.88	Slope	0.00	Slope	0.00
						Rock fragments	0.97
Gelkie--------------	30	Fair		Poor		Poor	
		Low content of organic matter	0.88	Slope	0.00	Slope	0.00
				Stone content	0.99		
Clayburn, warm------	20	Fair		Poor		Poor	
		Too acid	0.84	Slope	0.00	Slope	0.00
		Low content of organic matter	0.88				
222:							
Youngston, cool-----	90	Fair		Good		Fair	
		Low content of organic matter	0.12			Sodium content	0.78
						Salinity	0.88
		Sodium content	0.78				
		Water erosion	0.99				
223:							
Youngston, well drained----------	90	Fair		Poor		Fair	
		Low content of organic matter	0.88	Low strength	0.00	Salinity	0.88
				Shrink-swell	0.87	Sodium content	0.90
		Sodium content	0.90				
		Water erosion	0.99				

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
224:							
Zillion	35	Fair		Poor		Poor	
		Stone content	0.09	Slope	0.00	Slope	0.00
		Low content of organic matter	0.12	Cobble content	0.39	Hard to reclaim	0.00
				Stone content	0.64	Rock fragments	0.00
		Carbonate content	0.46			Carbonate content	0.46
		Cobble content	0.91				
		Droughty	0.98				
Barkelew, moist	25	Fair		Poor		Poor	
		Low content of organic matter	0.12	Slope	0.00	Slope	0.00
				Cobble content	0.00	Rock fragments	0.00
		Carbonate content	0.32			Hard to reclaim	0.00
		Cobble content	0.59			Carbonate content	0.32
		Droughty	0.96				
Grapit	20	Poor		Poor		Poor	
		Carbonate content	0.00	Slope	0.00	Slope	0.00
		Stone content	0.69	Stone content	0.77	Carbonate content	0.00
		Low content of organic matter	0.88	Cobble content	0.99	Hard to reclaim	0.00
						Rock fragments	0.00
225:							
Abracon	45	Fair		Good		Fair	
		Carbonate content	0.46			Carbonate content	0.46
		Sodium content	0.60			Sodium content	0.60
		Water erosion	0.99				
Solirec	40	Fair		Fair		Fair	
		Low content of organic matter	0.12	Shrink-swell	0.94	Carbonate content	0.46
		Carbonate content	0.46				
		Water erosion	0.90				
226:							
Arches	45	Poor		Poor		Poor	
		Too sandy	0.00	Depth to bedrock	0.00	Too sandy	0.00
		Wind erosion	0.00	Slope	0.08	Depth to bedrock	0.00
		Droughty	0.00			Slope	0.00
		Depth to bedrock	0.00				
		Low content of organic matter	0.12				
Mespun	20	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Slope	0.00
		Droughty	0.71				
		Low content of organic matter	0.88				
Rock outcrop	20	Not rated		Not rated		Not rated	
227:							
Bankard family	55	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00				
		Low content of organic matter	0.50				
		Droughty	0.70				

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
227:							
Cameo	35	Poor		Good		Fair	
		Wind erosion	0.00			Carbonate content	0.92
		Low content of organic matter	0.50				
		Carbonate content	0.92				
228:							
Bondman	50	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Slope	0.08	Slope	0.00
		Low content of organic matter	0.18				
Rock outcrop	35	Not rated		Not rated		Not rated	
229:							
Cameo	85	Poor		Good		Fair	
		Wind erosion	0.00			Carbonate content	0.92
		Low content of organic matter	0.50				
		Carbonate content	0.92				
230:							
Cragnot	35	Poor		Poor		Poor	
		Carbonate content	0.00	Slope	0.00	Carbonate content	0.00
		Stone content	0.03	Stone content	0.01	Hard to reclaim	0.00
		Low content of organic matter	0.12	Cobble content	0.95	Rock fragments	0.00
		Droughty	0.35			Slope	0.00
Pensore	35	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Carbonate content	0.00	Slope	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Cobble content	0.33	Slope	0.00
		Stone content	0.08	Stone content	0.41	Carbonate content	0.68
		Low content of organic matter	0.50				
		Cobble content	0.77				
Grapit	15	Poor		Poor		Poor	
		Carbonate content	0.00	Slope	0.00	Carbonate content	0.00
		Low content of organic matter	0.12	Stone content	0.32	Hard to reclaim	0.00
		Droughty	0.16	Cobble content	0.58	Rock fragments	0.00
		Stone content	0.29			Slope	0.00
		Cobble content	0.71				
231:							
Green River	70	Fair		Good		Fair	
		Low content of organic matter	0.12			Sodium content	0.22
		Sodium content	0.22			Salinity	0.50
		Droughty	0.97				
		Water erosion	0.99				

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
231:							
Fluvaquents	15	Poor		Poor		Poor	
		Wind erosion	0.00	Depth to saturated zone	0.00	Depth to saturated zone	0.00
		Too sandy	0.82			Too sandy	0.82
232:							
Lakebench	50	Poor		Fair		Poor	
		Wind erosion	0.00	Slope	0.82	Slope	0.00
		Low content of organic matter	0.12			Carbonate content	0.32
		Carbonate content	0.32				
		Water erosion	0.90				
Strell	35	Poor		Poor		Poor	
		Too sandy	0.00	Depth to bedrock	0.00	Too sandy	0.00
		Wind erosion	0.00	Slope	0.82	Depth to bedrock	0.00
		Droughty	0.00			Slope	0.00
		Depth to bedrock	0.00			Carbonate content	0.97
		Low content of organic matter	0.12				
		Carbonate content	0.97				
233:							
Lakebench	50	Fair		Fair		Poor	
		Low content of organic matter	0.12	Slope	0.82	Slope	0.00
		Carbonate content	0.32			Carbonate content	0.32
		Water erosion	0.90				
Yampa	35	Fair		Poor		Poor	
		Stone content	0.01	Cobble content	0.00	Rock fragments	0.00
		Droughty	0.04	Stone content	0.03	Slope	0.00
		Carbonate content	0.08	Slope	0.82	Hard to reclaim	0.00
		Low content of organic matter	0.12			Carbonate content	0.08
		Cobble content	0.24				
234:							
Mantlemine	85	Fair		Good		Good	
		Low content of organic matter	0.12				
		Carbonate content	0.92				
		Water erosion	0.99				
235:							
Mantlemine	55	Fair		Good		Good	
		Low content of organic matter	0.12				
		Carbonate content	0.92				
		Water erosion	0.99				
Emlin	30	Fair		Poor		Fair	
		Low content of organic matter	0.50	Low strength	0.00	Too clayey	0.65
		Carbonate content	0.68	Shrink-swell	0.89	Carbonate content	0.68
		Water erosion	0.99				
		Too clayey	0.99				

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
236:							
Mido	85	Poor		Good		Fair	
		Wind erosion	0.00			Too sandy	0.03
		Too sandy	0.03				
		Low content of organic matter	0.12				
237:							
Mikim loam	55	Poor		Fair		Good	
		Too alkaline	0.00	Low strength	0.78		
		Low content of organic matter	0.12	Shrink-swell	0.87		
		Water erosion	0.90				
Mikim silt loam	35	Poor		Fair		Fair	
		Too alkaline	0.00	Shrink-swell	0.87	Sodium content	0.40
		Sodium content	0.40			Salinity	0.88
		Low content of organic matter	0.50				
		Water erosion	0.68				
238:							
Milok	85	Poor		Good		Good	
		Too alkaline	0.00				
		Low content of organic matter	0.12				
239:							
Milok	45	Poor		Poor		Poor	
		Too alkaline	0.00	Slope	0.00	Slope	0.00
		Low content of organic matter	0.12				
Solirec	25	Fair		Poor		Poor	
		Low content of organic matter	0.12	Slope	0.00	Slope	0.00
		Carbonate content	0.46			Carbonate content	0.46
		Water erosion	0.99				
Strych	15	Poor		Poor		Poor	
		Stone content	0.00	Stone content	0.00	Hard to reclaim	0.00
		Low content of organic matter	0.18	Slope	0.00	Slope	0.00
		Carbonate content	0.46	Cobble content	0.18	Rock fragments	0.00
		Droughty	0.88			Carbonate content	0.46
		Cobble content	0.99				
240:							
Milok	70	Fair		Fair		Poor	
		Low content of organic matter	0.12	Slope	0.92	Slope	0.00
		Water erosion	0.37				
Strych	20	Fair		Poor		Poor	
		Droughty	0.08	Cobble content	0.00	Hard to reclaim	0.00
		Low content of organic matter	0.12			Rock fragments	0.00
		Cobble content	0.24			Slope	0.04
		Carbonate content	0.46			Carbonate content	0.46

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
241:							
Pensore	60	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Carbonate content	0.00	Slope	0.02	Depth to bedrock	0.00
		Depth to bedrock	0.00	Cobble content	0.33	Slope	0.00
		Stone content	0.08	Stone content	0.41	Carbonate content	0.68
		Low content of organic matter	0.50				
		Cobble content	0.77				
Roto	25	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Carbonate content	0.00
		Carbonate content	0.00	Slope	0.02	Rock fragments	0.00
		Stone content	0.01	Stone content	0.18	Slope	0.00
		Depth to bedrock	0.03			Depth to bedrock	0.03
		Low content of organic matter	0.12				
242:							
Riverwash	85	Not rated		Not rated		Not rated	
243:							
Rizno	35	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Cobble content	0.62	Rock fragments	0.00
		Low content of organic matter	0.18			Slope	0.04
		Carbonate content	0.46			Carbonate content	0.46
		Cobble content	0.92				
Windcomb	35	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00			Depth to bedrock	0.00
		Low content of organic matter	0.12			Slope	0.04
Anasazi	15	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.10	Stone content	0.99	Slope	0.04
		Low content of organic matter	0.12			Depth to bedrock	0.10
		Carbonate content	0.46			Carbonate content	0.46
		Stone content	0.94				
244:							
Rock outcrop	60	Not rated		Not rated		Not rated	
Hackling	30	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Cobble content	0.00	Depth to bedrock	0.00
		Cobble content	0.09	Slope	0.00	Slope	0.00
		Stone content	0.12	Stone content	0.52		
		Low content of organic matter	0.12				
245:							
Rock outcrop	30	Not rated		Not rated		Not rated	

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
245:							
Torriorthents-------	30	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Rock fragments	0.00
		Stone content	0.08	Stone content	0.38	Depth to bedrock	0.00
		Low content of organic matter	0.18			Carbonate content	0.68
		Carbonate content	0.68				
Ustorthents---------	30	Fair		Poor		Poor	
		Droughty	0.24	Depth to bedrock	0.00	Slope	0.00
		Low content of organic matter	0.50	Slope	0.00	Rock fragments	0.00
		Depth to bedrock	0.79	Cobble content	0.34	Depth to bedrock	0.79
		Cobble content	0.92				
246:							
Schoonover----------	55	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00			Depth to bedrock	0.00
		Low content of organic matter	0.12			Slope	0.04
		Carbonate content	0.46				
Duffymont----------	30	Poor		Poor		Poor	
		Cobble content	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Droughty	0.00	Cobble content	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00			Slope	0.04
247:							
Stout---------------	60	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Slope	0.50	Slope	0.00
		Low content of organic matter	0.12				
Rock outcrop--------	30	Not rated		Not rated		Not rated	
248:							
Strych--------------	50	Poor		Poor		Poor	
		Stone content	0.00	Stone content	0.00	Hard to reclaim	0.00
		Low content of organic matter	0.18	Slope	0.02	Rock fragments	0.00
		Carbonate content	0.46	Cobble content	0.18	Slope	0.00
		Droughty	0.88			Carbonate content	0.46
		Cobble content	0.99				
Mellenthin----------	35	Poor		Poor		Poor	
		Stone content	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Droughty	0.00	Stone content	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.02	Slope	0.00
		Low content of organic matter	0.18	Cobble content	0.95	Carbonate content	0.46
		Carbonate content	0.46				

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
249:							
Zillion	40	Fair		Poor		Poor	
		Low content of organic matter	0.12	Slope	0.00	Slope	0.00
		Cobble content	0.24	Cobble content	0.03	Hard to reclaim	0.00
		Stone content	0.26	Stone content	0.83	Rock fragments	0.12
		Carbonate content	0.54				
		Droughty	0.79				
Yampa	25	Fair		Poor		Poor	
		Stone content	0.01	Slope	0.00	Slope	0.00
		Droughty	0.04	Cobble content	0.00	Rock fragments	0.00
		Carbonate content	0.08	Stone content	0.03	Hard to reclaim	0.00
		Low content of organic matter	0.12			Carbonate content	0.08
		Cobble content	0.24				
Clyl	20	Poor		Poor		Poor	
		Stone content	0.00	Slope	0.00	Slope	0.00
		Carbonate content	0.00	Stone content	0.26	Carbonate content	0.00
		Low content of organic matter	0.12	Cobble content	0.99	Hard to reclaim	0.00
		Droughty	0.92			Rock fragments	0.00
250:							
Abracon	85	Fair		Good		Fair	
		Carbonate content	0.46			Carbonate content	0.46
		Sodium content	0.60			Sodium content	0.60
		Water erosion	0.99				
251:							
Badland	60	Poor		Not rated		Poor	
		Too clayey	0.00			Slope	0.00
		Droughty	0.00			Too clayey	0.00
		Low content of organic matter	0.00			Depth to bedrock	0.00
		Depth to bedrock	0.00			Salinity	0.00
		Sodium content	0.22			Sodium content	0.22
		Salinity	0.50			Rock fragments	0.88
Renegade	25	Poor		Poor		Poor	
		Stone content	0.00	Slope	0.00	Slope	0.00
		Droughty	0.56	Stone content	0.00	Hard to reclaim	0.00
		Cobble content	0.98	Cobble content	0.35	Rock fragments	0.00
		Too sandy	0.99	Depth to bedrock	0.99	Too sandy	0.99
252:							
Bigtom	50	Poor		Poor		Poor	
		Cobble content	0.00	Cobble content	0.00	Slope	0.00
		Stone content	0.00	Stone content	0.00	Hard to reclaim	0.00
		Droughty	0.02	Slope	0.50	Rock fragments	0.00
		Too acid	0.84			Too clayey	0.84
		Too clayey	0.95				
Namlot	20	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Cobble content	0.00	Rock fragments	0.00
		Cobble content	0.07	Slope	0.00	Depth to bedrock	0.00

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
252:							
Dokie	15	Poor		Poor		Poor	
		Stone content	0.00	Slope	0.00	Slope	0.00
		Droughty	0.00	Stone content	0.00	Hard to reclaim	0.00
		Cobble content	0.80	Cobble content	0.06	Rock fragments	0.00
		Too acid	0.84				
		Low content of organic matter	0.88				
253:							
Clapper	85	Fair		Fair		Poor	
		Carbonate content	0.32	Stone content	0.84	Rock fragments	0.00
		Droughty	0.80			Hard to reclaim	0.00
		Low content of organic matter	0.88			Slope	0.04
						Carbonate content	0.32
		Stone content	0.97			Sodium content	0.98
		Sodium content	0.97				
254:							
Cliff	85	Fair		Good		Fair	
		Low content of organic matter	0.12			Sodium content	0.40
		Sodium content	0.40				
255:							
Clyl	45	Poor		Poor		Poor	
		Stone content	0.00	Stone content	0.00	Slope	0.00
		Carbonate content	0.00	Slope	0.00	Carbonate content	0.00
		Low content of organic matter	0.12	Cobble content	0.76	Rock fragments	0.00
						Hard to reclaim	0.00
		Droughty	0.44				
		Cobble content	0.95				
Pinerid	40	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Carbonate content	0.00
		Carbonate content	0.00	Slope	0.92	Rock fragments	0.00
		Depth to bedrock	0.00			Depth to bedrock	0.00
						Slope	0.00
256:							
Cortyzack	65	Fair		Poor		Fair	
		Carbonate content	0.80	Low strength	0.00	Slope	0.04
		Low content of organic matter	0.88	Shrink-swell	0.96	Carbonate content	0.80
Diagulch	20	Fair		Good		Fair	
		Carbonate content	0.80			Carbonate content	0.80
						Slope	0.96
257:							
Cortyzack	55	Fair		Poor		Fair	
		Carbonate content	0.80	Low strength	0.00	Slope	0.04
		Low content of organic matter	0.88	Shrink-swell	0.96	Carbonate content	0.80
Duffymont	30	Poor		Poor		Poor	
		Cobble content	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Droughty	0.00	Cobble content	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00			Slope	0.04

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
258:							
Cortyzack	45	Fair		Poor		Fair	
		Carbonate content	0.80	Low strength	0.00	Slope	0.04
		Low content of organic matter	0.88	Shrink-swell	0.96	Carbonate content	0.80
Flynncove	45	Fair		Poor		Poor	
		Droughty	0.17	Cobble content	0.00	Hard to reclaim	0.00
		Cobble content	0.18	Stone content	0.93	Rock fragments	0.00
		Low content of organic matter	0.88			Slope	0.00
		Stone content	0.90			Too clayey	0.86
		Too clayey	0.98				
259:							
Denco	45	Poor		Poor		Poor	
		Too clayey	0.00	Depth to bedrock	0.00	Too clayey	0.00
		Low content of organic matter	0.88	Low strength	0.00	Slope	0.00
		Depth to bedrock	0.97	Shrink-swell	0.12	Depth to bedrock	0.97
Gerst	40	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Slope	0.18	Slope	0.00
		Low content of organic matter	0.12			Carbonate content	0.80
		Carbonate content	0.80			Rock fragments	0.95
		Water erosion	0.90				
260:							
Dokie	70	Poor		Poor		Poor	
		Stone content	0.00	Slope	0.00	Slope	0.00
		Droughty	0.00	Stone content	0.00	Hard to reclaim	0.00
		Cobble content	0.80	Cobble content	0.06	Rock fragments	0.00
		Too acid	0.84				
		Low content of organic matter	0.88				
Flynncove	15	Poor		Poor		Poor	
		Stone content	0.00	Slope	0.00	Slope	0.00
		Droughty	0.00	Stone content	0.00	Hard to reclaim	0.00
		Cobble content	0.68	Cobble content	0.00	Rock fragments	0.00
		Too clayey	0.98			Too clayey	0.86
261:							
Dokie	50	Poor		Poor		Poor	
		Stone content	0.00	Slope	0.00	Slope	0.00
		Droughty	0.00	Stone content	0.00	Hard to reclaim	0.00
		Cobble content	0.80	Cobble content	0.06	Rock fragments	0.00
		Too acid	0.84				
		Low content of organic matter	0.88				
Namlot	40	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Cobble content	0.00	Rock fragments	0.00
		Cobble content	0.07	Slope	0.00	Depth to bedrock	0.00

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
262:							
Gompers	85	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00			Depth to bedrock	0.00
		Sodium content	0.60			Slope	0.00
		Carbonate content	0.80			Sodium content	0.60
						Carbonate content	0.80
263:							
Hanksville	85	Poor		Poor		Poor	
		Too clayey	0.00	Depth to bedrock	0.00	Too clayey	0.00
		Low content of organic matter	0.12	Low strength	0.00	Salinity	0.00
		Sodium content	0.60	Shrink-swell	0.12	Slope	0.04
		Droughty	0.68			Sodium content	0.60
		Depth to bedrock	0.79			Depth to bedrock	0.79
		Water erosion	0.90				
		Salinity	0.97				
264:							
Mikim	85	Poor		Fair		Fair	
		Too alkaline	0.00	Shrink-swell	0.87	Slope	0.96
		Low content of organic matter	0.12			Sodium content	0.98
		Water erosion	0.90				
		Sodium content	0.97				
265:							
Mikim	85	Poor		Fair		Poor	
		Too alkaline	0.00	Shrink-swell	0.87	Sodium content	0.00
		Sodium content	0.00			Salinity	0.88
		Low content of organic matter	0.50				
		Water erosion	0.68				
266:							
Rock outcrop	40	Not rated		Not rated		Not rated	
Boxring	25	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Stone content	0.00	Depth to bedrock	0.00
		Stone content	0.00	Cobble content	0.00	Slope	0.00
		Cobble content	0.13	Slope	0.82		
Tridell	25	Poor		Poor		Poor	
		Cobble content	0.00	Slope	0.00	Slope	0.00
		Droughty	0.30	Cobble content	0.00	Hard to reclaim	0.00
		Carbonate content	0.46			Rock fragments	0.00
		Low content of organic matter	0.88			Carbonate content	0.46
267:							
Solirec	35	Fair		Good		Fair	
		Low content of organic matter	0.12			Carbonate content	0.46
		Carbonate content	0.46				
		Water erosion	0.90				

Table 16.--Construction materials--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
267:							
Abracon	30	Fair		Good		Fair	
		Carbonate content	0.46			Carbonate content	0.46
		Sodium content	0.60			Sodium content	0.60
		Water erosion	0.99				
Begay	20	Poor		Good		Fair	
		Too alkaline	0.00			Sodium content	0.90
		Low content of organic matter	0.12			Slope	0.96
		Sodium content	0.90				
268:							
Toliver	55	Poor		Poor		Poor	
		Stone content	0.00	Slope	0.00	Slope	0.00
		Low content of organic matter	0.12	Stone content	0.00	Hard to reclaim	0.00
				Cobble content	0.35	Rock fragments	0.00
		Droughty	0.72				
		Cobble content	0.98				
Rock outcrop	30	Not rated		Not rated		Not rated	
269:							
Walknolls	60	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Rock fragments	0.00
		Sodium content	0.60			Depth to bedrock	0.00
		Carbonate content	0.80			Sodium content	0.60
						Carbonate content	0.80
Badland	15	Poor		Not rated		Poor	
		Too clayey	0.00			Slope	0.00
		Droughty	0.00			Too clayey	0.00
		Low content of organic matter	0.00			Depth to bedrock	0.00
						Salinity	0.00
		Depth to bedrock	0.00			Sodium content	0.22
		Sodium content	0.22			Rock fragments	0.88
		Salinity	0.50				
Rock outcrop	10	Not rated		Not rated		Not rated	
270:							
Walknolls	55	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00			Depth to bedrock	0.00
		Sodium content	0.60			Slope	0.00
		Carbonate content	0.80			Sodium content	0.60
						Carbonate content	0.80
Gilston	35	Poor		Good		Poor	
		Too alkaline	0.00			Rock fragments	0.00
		Sodium content	0.40			Sodium content	0.40
		Salinity	0.88				
		Low content of organic matter	0.88				
271:							
Water	95	Not rated		Not rated		Not rated	

Table 17.--Water management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1:							
Abor	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.10	Hard to pack	0.75	Depth to water	1.00
		Depth to bedrock	0.02	Thin layer	0.61		
2:							
Abor	80	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.97	Hard to pack	0.75	Depth to water	1.00
		Depth to bedrock	0.02	Thin layer	0.61		
3:							
Adderton	90	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
				Seepage	0.10		
4:							
Almy	90	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
5:							
Apmay	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Cutbanks cave	1.00
				Depth to saturated zone	0.95	Depth to water	0.02
6:							
Avalon	45	Somewhat limited		Very limited		Very limited	
		Seepage	0.04	Piping	1.00	Depth to water	1.00
Mack	45	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	0.99	Depth to water	1.00
7:							
Avalon	30	Somewhat limited		Very limited		Very limited	
		Seepage	0.04	Piping	1.00	Depth to water	1.00
		Depth to bedrock	0.01	Thin layer	0.34		
Persayo, moist	25	Somewhat limited		Very limited		Very limited	
		Depth to bedrock	0.84	Thin layer	1.00	Depth to water	1.00
		Slope	0.12	Piping	1.00		
Degater	20	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.12	Thin layer	0.58	Depth to water	1.00
		Depth to bedrock	0.02				
8:							
Badland	90	Very limited		Not rated		Not rated	
		Depth to bedrock	1.00				
		Slope	1.00				
9:							
Baroid	55	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Piping	0.22	Depth to water	1.00
				Seepage	0.07		

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
9:							
Eghelm	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
				Seepage	0.10		
10:							
Battlement	85	Somewhat limited		Very limited		Very limited	
		Seepage	0.54	Piping	1.00	Depth to water	1.00
				Seepage	0.09		
11:							
Battlement, saline	80	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.72	Piping	1.00	Depth to water	0.90
				Salinity	0.50	Salty water	0.78
						Slow refill	0.28
						Cutbanks cave	0.10
12:							
Berlake	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.33	Depth to water	1.00
13:							
Berlake	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.33	Depth to water	1.00
		Slope	0.10				
14:							
Berlake	55	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.27	Depth to water	1.00
Maysprings	30	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.95	Depth to water	1.00
15:							
Berlake	35	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Seepage	0.09	Depth to water	1.00
		Slope	0.03				
Taffom	30	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.38	Depth to water	1.00
		Slope	0.03				
Gretdivid	15	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.91	Depth to water	1.00
		Slope	0.03				
16:							
Bilhil	85	Not limited		Not limited		Very limited	
						Slow refill	1.00
						Depth to water	0.81
						Cutbanks cave	0.10
17:							
Binco	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.50	Hard to pack	0.20	Depth to water	1.00

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
18:							
Boltus	50	Somewhat limited		Very limited		Very limited	
		Depth to bedrock	0.58	Thin layer	1.00	Depth to water	1.00
				Piping	0.16		
Beamton	25	Somewhat limited		Somewhat limited		Very limited	
		Depth to bedrock	0.06	Thin layer	0.77	Depth to water	1.00
				Piping	0.19		
19:							
Borollic Natrargids	40	Somewhat limited		Very limited		Very limited	
		Seepage	0.04	Piping	1.00	Depth to water	1.00
				Salinity	0.12		
				Seepage	0.01		
Borollic Haplargids	30	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Seepage	0.09	Depth to water	1.00
		Slope	0.01				
Ustic Torrifluvents	25	Somewhat limited		Very limited		Very limited	
		Seepage	0.54	Piping	1.00	Cutbanks cave	1.00
				Seepage	0.10	Depth to water	0.96
						Slow refill	0.46
20:							
Brownsto	50	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Seepage	0.09	Depth to water	1.00
		Slope	0.02				
Castee	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
		Slope	0.02	Seepage	0.09		
21:							
Bulkley	80	Somewhat limited		Not limited		Very limited	
		Slope	0.21			Depth to water	1.00
22:							
Bulkley	80	Not limited		Somewhat limited		Very limited	
				Hard to pack	0.93	Depth to water	1.00
23:							
Bulkley	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.10	Hard to pack	0.93	Depth to water	1.00
24:							
Bulkley	60	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.45	Hard to pack	0.94	Depth to water	1.00
Quilt	25	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.64	Piping	0.24	Depth to water	1.00
		Seepage	0.04				
25:							
Campspass	90	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.04	Piping	0.49	Depth to water	1.00

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
26:							
Campspass	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.10	Piping	0.49	Depth to water	1.00
		Seepage	0.04				
27:							
Canlodore	95	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.93	Depth to water	1.00
		Slope	0.41	Content of large stones	0.45		
28:							
Carbol	40	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
				Seepage	0.05		
Irigul	25	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.02	Seepage	0.19		
Rock outcrop	25	Very limited		Not rated		Not rated	
		Depth to bedrock	1.00				
		Slope	0.02				
29:							
Carbol	45	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
				Seepage	0.05		
Miracle	30	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Depth to bedrock	0.61	Thin layer	0.61		
				Seepage	0.03		
30:							
Carmody	35	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.99	Depth to water	1.00
		Depth to bedrock	0.34	Seepage	0.10		
		Slope	0.01				
Rock River	30	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.09	Depth to water	1.00
		Slope	0.01				
Crestman	20	Somewhat limited		Very limited		Very limited	
		Depth to bedrock	0.69	Thin layer	1.00	Depth to water	1.00
		Slope	0.01	Seepage	0.39		
31:							
Castee	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
				Seepage	0.09		
32:							
Chroder	80	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.09	Depth to water	1.00

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
33:							
Clayburn, warm------	85	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.81	Depth to water	1.00
		Slope	0.02				
34:							
Clayburn------------	40	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.09	Depth to water	1.00
		Slope	0.88				
Foidel--------------	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.88	Seepage	0.09	Depth to water	1.00
		Seepage	0.72				
35:							
Clayburn------------	45	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.88	Depth to water	1.00
		Slope	0.50	Seepage	0.03		
Youga, moist--------	35	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	0.99	Depth to water	1.00
		Slope	0.50	Seepage	0.05		
36:							
Clifsand------------	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.93	Depth to water	1.00
				Content of large stones	0.27		
Chroder-------------	30	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.09	Depth to water	1.00
37:							
Cochetopa-----------	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.10	Piping	0.01	Depth to water	1.00
38:							
Cochetopa-----------	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.97	Piping	0.01	Depth to water	1.00
39:							
Cochetopa, warm-----	85	Not limited		Somewhat limited		Very limited	
				Piping	0.01	Depth to water	1.00
40:							
Cochetopa-----------	45	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Piping	0.01	Depth to water	1.00
Gothic--------------	40	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.12	Content of large stones	0.01	Depth to water	1.00
41:							
Cochetopa-----------	40	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.02	Depth to water	1.00
		Slope	0.72				
Gothic--------------	35	Somewhat limited		Not limited		Very limited	
		Slope	0.72			Depth to water	1.00

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
42:							
Cochetopa	50	Not limited		Somewhat limited		Very limited	
				Piping	0.01	Depth to water	1.00
Jerry	35	Not limited		Somewhat limited		Very limited	
				Piping	0.03	Depth to water	1.00
43:							
Coldspring, moist	80	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Depth to bedrock	0.19	Thin layer	0.19		
				Seepage	0.06		
44:							
Cowestglen	80	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Piping	0.02	Depth to water	1.00
45:							
Coyet	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.39	Depth to water	1.00
46:							
Coyet	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.39	Depth to water	1.00
		Slope	0.10				
47:							
Coyet	45	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.93	Depth to water	1.00
		Slope	0.72	Thin layer	0.16		
		Depth to bedrock	0.01				
Crestman, moist	35	Somewhat limited		Very limited		Very limited	
		Slope	0.72	Thin layer	1.00	Depth to water	1.00
		Depth to bedrock	0.69	Seepage	0.39		
48:							
Crago	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.97	Seepage	0.69	Depth to water	1.00
		Seepage	0.72				
Pensore	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.32	Seepage	0.12		
		Seepage	0.04				
Grapit	15	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.95	Seepage	0.19	Depth to water	1.00
		Seepage	0.04	Content of large stones	0.01		
49:							
Cryoborolls, slumped	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.64	Piping	0.88	Depth to water	1.00
50:							
Cushool	85	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Thin layer	0.96	Depth to water	1.00
		Depth to bedrock	0.26	Seepage	0.09		

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
51:							
Cushool	85	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Thin layer	0.96	Depth to water	1.00
		Depth to bedrock	0.26	Seepage	0.09		
		Slope	0.10				
52:							
Danavore	45	Somewhat limited		Very limited		Very limited	
		Seepage	0.54	Thin layer	0.99	Depth to water	1.00
		Depth to bedrock	0.37	Content of large stones	0.34		
		Slope	0.08	Seepage	0.06		
Waybe	30	Somewhat limited		Very limited		Very limited	
		Depth to bedrock	0.66	Thin layer	1.00	Depth to water	1.00
		Slope	0.08	Piping	0.03		
53:							
Davtone	45	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Slope	0.24				
Forsey	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Content of large stones	1.00	Depth to water	1.00
		Slope	0.24	Seepage	0.09		
54:							
Deaver	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.50	Thin layer	0.86	Depth to water	1.00
		Depth to bedrock	0.11	Piping	0.23		
Avalon	30	Somewhat limited		Very limited		Very limited	
		Seepage	0.04	Piping	1.00	Depth to water	1.00
55:							
Deaver	60	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.10	Thin layer	0.70	Depth to water	1.00
		Depth to bedrock	0.04	Piping	0.22		
Chipeta	30	Somewhat limited		Very limited		Very limited	
		Depth to bedrock	0.58	Thin layer	1.00	Depth to water	1.00
		Slope	0.10	Piping	0.40		
56:							
Debone	90	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
				Salinity	0.12		
				Seepage	0.10		
57:							
Detra	50	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Seepage	0.05	Depth to water	1.00
Cortyzack	40	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
				Seepage	0.06		

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
58:							
Diaflats	45	Somewhat limited		Very limited		Very limited	
		Depth to bedrock	0.95	Piping	1.00	Depth to water	1.00
		Seepage	0.72	Thin layer	0.95		
Fondillas	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
				Content of large stones	0.25		
59:							
Dranyon	90	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Seepage	0.03	Depth to water	1.00
		Slope	0.01				
60:							
Dumps, mine	100	Somewhat limited		Not rated		Not rated	
		Slope	0.50				
61:							
Ecklund	50	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.96	Depth to water	1.00
		Depth to bedrock	0.66	Thin layer	0.66		
Tipperary	40	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.32	Depth to water	1.00
62:							
Eghelm	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.08	Depth to water	1.00
63:							
Eghelm, moist	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.27	Depth to water	1.00
64:							
Emlin	85	Somewhat limited		Very limited		Very limited	
		Seepage	0.04	Piping	1.00	Depth to water	1.00
65:							
Emlin	65	Somewhat limited		Very limited		Very limited	
		Seepage	0.04	Piping	1.00	Depth to water	1.00
Tymosling	20	Somewhat limited		Somewhat limited		Very limited	
		Depth to bedrock	0.04	Thin layer	0.70	Depth to water	1.00
66:							
Evanot	90	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
67:							
Evanot	85	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Slope	0.10				
68:							
Evanot	50	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Slope	0.01				

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
68:							
Yamo	25	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Slope	0.01				
69:							
Fenster	45	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
Thenipel	30	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
70:							
Fluvaquents, frequently flooded	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
				Seepage	0.08		
Haplaquolls, frequently flooded	45	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to saturated zone	1.00	Cutbanks cave	1.00
				Seepage	1.00		
71:							
Flygare, dry	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.97	Content of large stones	0.11	Depth to water	1.00
		Seepage	0.72	Seepage	0.06		
72:							
Foidel, cool	85	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.97	Depth to water	1.00
		Slope	0.02				
73:							
Foidel	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.97	Piping	0.97	Depth to water	1.00
		Seepage	0.72				
74:							
Foidel, moist	35	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.93	Depth to water	1.00
		Slope	0.02				
Flygare	30	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Content of large stones	0.11	Depth to water	1.00
		Slope	0.02	Seepage	0.06		
Skyway, moist	20	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.83	Depth to water	1.00
		Depth to bedrock	0.83	Seepage	0.10		
		Slope	0.02				

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
75:							
Fonce	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.96	Depth to water	1.00
76:							
Fonce	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.12	Depth to water	1.00
77:							
Forelle	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
				Seepage	0.09		
78:							
Forelle	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
		Slope	0.10	Seepage	0.09		
79:							
Forelle	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
				Seepage	0.09		
Evanot	40	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
80:							
Forelle	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
		Slope	0.10	Seepage	0.09		
Evanot	40	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Slope	0.10				
81:							
Forelle	40	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.99	Depth to water	1.00
				Seepage	0.05		
Obadia	35	Somewhat limited		Very limited		Very limited	
		Seepage	0.04	Piping	1.00	Depth to water	1.00
				Seepage	0.03		
82:							
Forelle	30	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Slope	0.01				
Pinelli	30	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.04	Piping	0.45	Depth to water	1.00
		Slope	0.01				
Maysprings	15	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.95	Depth to water	1.00
		Slope	0.01				

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
83:							
Forsey	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Content of large stones	1.00	Depth to water	1.00
		Slope	0.02	Seepage	0.09		
Libeg	30	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Seepage	0.25	Depth to water	1.00
				Content of large stones	0.01		
84:							
Gebson, moist	55	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Seepage	0.06	Depth to water	1.00
		Slope	0.03				
Youga	35	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.09	Depth to water	1.00
85:							
Giarch	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
				Salinity	1.00		
				Piping	1.00		
86:							
Gracot	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	0.99	Depth to water	1.00
		Slope	0.08				
Maybell	30	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.98	Depth to water	1.00
		Slope	0.08				
87:							
Gretdivid	35	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.91	Depth to water	1.00
		Slope	0.12				
Taffom	25	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.09	Depth to water	1.00
		Slope	0.12				
Abor	15	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.12	Thin layer	0.86	Depth to water	1.00
		Depth to bedrock	0.11	Hard to pack	0.72		
88:							
Grieves	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.10	Depth to water	1.00
89:							
Grieves	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.10	Depth to water	1.00
		Slope	0.10				

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
90:							
Grieves	45	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.10	Depth to water	1.00
		Slope	0.12				
Crestman	35	Somewhat limited		Very limited		Very limited	
		Depth to bedrock	0.66	Thin layer	1.00	Depth to water	1.00
		Slope	0.41	Seepage	0.39		
91:							
Grieves	40	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.32	Depth to water	1.00
		Slope	0.03				
Yamo	25	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
				Seepage	0.04		
Crestman	20	Somewhat limited		Very limited		Very limited	
		Depth to bedrock	0.69	Thin layer	1.00	Depth to water	1.00
		Slope	0.50	Seepage	0.39		
92:							
Grimm	50	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.93	Depth to water	1.00
		Slope	0.50	Content of large stones	0.89		
Ustic Torriorthents, shallow	40	Somewhat limited		Very limited		Very limited	
		Depth to bedrock	0.53	Thin layer	1.00	Depth to water	1.00
		Slope	0.50	Seepage	0.09		
		Seepage	0.46				
93:							
Gullied land	85	Not limited		Not rated		Very limited	
						Depth to water	1.00
94:							
Hapney, moist	90	Somewhat limited		Very limited		Very limited	
		Seepage	0.04	Piping	1.00	Depth to water	1.00
				Salinity	0.50		
				Seepage	0.03		
95:							
Haterton	60	Somewhat limited		Very limited		Very limited	
		Depth to bedrock	0.61	Thin layer	1.00	Depth to water	1.00
		Seepage	0.04	Piping	0.22		
Piezon	30	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Depth to bedrock	0.34	Thin layer	0.99		
96:							
Heathcoat	85	Somewhat limited		Very limited		Very limited	
		Seepage	0.04	Piping	1.00	Depth to water	1.00
				Seepage	0.03		

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
97:							
Heathcoat	60	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.01	Piping	0.24	Depth to water	1.00
Clayburn	25	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.88	Depth to water	1.00
		Slope	0.12				
98:							
Herm	50	Somewhat limited		Not limited		Very limited	
		Slope	0.03			Depth to water	1.00
Fughes	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.03	Hard to pack	0.11	Depth to water	1.00
				Content of large stones	0.01		
99:							
Hesperus, dry	85	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.77	Depth to water	1.00
100:							
Hesperus	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.64	Piping	0.83	Depth to water	1.00
		Seepage	0.04				
101:							
Hesperus	90	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.04	Piping	0.83	Depth to water	1.00
		Slope	0.02				
102:							
Holter	55	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Content of large stones	0.86	Depth to water	1.00
		Slope	0.08				
Detra	30	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.12	Depth to water	1.00
103:							
Iles	85	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.54	Piping	0.70	Depth to water	1.00
104:							
Ironco	60	Somewhat limited		Very limited		Very limited	
		Slope	0.82	Content of large stones	1.00	Depth to water	1.00
		Seepage	0.72				
Mulgon, dry	25	Somewhat limited		Very limited		Very limited	
		Slope	0.82	Content of large stones	1.00	Depth to water	1.00
		Seepage	0.04	Seepage	0.02		
105:							
Ironsprings	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.17	Depth to water	1.00

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
106:							
Ironsprings	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.17	Depth to water	1.00
		Slope	0.21				
107:							
Ironsprings	40	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.39	Depth to water	1.00
		Slope	0.03				
Maysprings	25	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.95	Depth to water	1.00
		Slope	0.03				
Gretdivid	15	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.91	Depth to water	1.00
		Slope	0.03				
108:							
Jerry	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.12	Piping	0.16	Depth to water	1.00
		Seepage	0.04				
Cochetopa	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.12	Piping	0.01	Depth to water	1.00
109:							
Joebas	60	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.03	Seepage	0.09		
Rock outcrop	30	Very limited		Not rated		Not rated	
		Depth to bedrock	1.00				
		Slope	0.21				
110:							
Kemmerer	80	Somewhat limited		Very limited		Very limited	
		Depth to bedrock	0.37	Thin layer	0.99	Depth to water	1.00
		Slope	0.10	Piping	0.02		
111:							
Kemmerer	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.97	Thin layer	0.94	Depth to water	1.00
		Depth to bedrock	0.20	Piping	0.10		
Grapit	35	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Seepage	0.19	Depth to water	1.00
		Slope	0.50	Content of large stones	0.06		
112:							
Kemmerer	45	Somewhat limited		Very limited		Very limited	
		Slope	0.50	Thin layer	0.99	Depth to water	1.00
		Depth to bedrock	0.37	Piping	0.02		
Moyerson	40	Somewhat limited		Very limited		Very limited	
		Depth to bedrock	0.58	Thin layer	1.00	Depth to water	1.00
		Slope	0.50	Hard to pack	0.10		

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
113:							
Kemmerer	60	Somewhat limited		Very limited		Very limited	
		Depth to bedrock	0.37	Thin layer	0.99	Depth to water	1.00
		Slope	0.08	Piping	0.02		
Yamo	20	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Slope	0.08				
114:							
Lamphier	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.09	Depth to water	1.00
		Slope	0.02				
115:							
Lamphier	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.09	Depth to water	1.00
		Slope	0.97				
116:							
Lamphier	45	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.09	Depth to water	1.00
		Slope	0.02				
Jerry	30	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.04	Piping	0.09	Depth to water	1.00
		Slope	0.02				
117:							
Lamphier	45	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.09	Depth to water	1.00
		Slope	0.97				
Jerry	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.97	Piping	0.09	Depth to water	1.00
		Seepage	0.04				
118:							
Lander	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Cutbanks cave	1.00
				Piping	1.00	Depth to water	0.25
				Depth to saturated zone	0.43		
119:							
Langspring	85	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.92	Depth to water	1.00
				Seepage	0.05		
120:							
Layoint	35	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.81	Depth to water	1.00
		Depth to bedrock	0.81	Seepage	0.37		
Moosed	25	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.01	Seepage	0.96		

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
120:							
Berlake	20	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
				Seepage	0.06		
121:							
Leaps	90	Not limited		Not limited		Very limited	
						Depth to water	1.00
122:							
Leswill	50	Somewhat limited		Very limited		Very limited	
		Seepage	0.04	Piping	1.00	Depth to water	1.00
				Salinity	0.50		
Rogrube	30	Somewhat limited		Very limited		Very limited	
		Seepage	0.04	Piping	1.00	Depth to water	1.00
				Seepage	0.03		
123:							
Lilsnake	45	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.01	Piping	1.00		
Sandwash	30	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Content of large stones	0.75	Depth to water	1.00
		Depth to bedrock	0.69	Thin layer	0.70		
124:							
Losee	45	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Content of large stones	0.84	Depth to water	1.00
		Slope	0.97	Seepage	0.09		
Thornburgh, dry	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Content of large stones	1.00	Depth to water	1.00
		Slope	0.97	Seepage	0.09		
125:							
Massadona	85	Not limited		Not limited		Very limited	
						Depth to water	1.00
126:							
Massadona	65	Not limited		Not limited		Very limited	
						Depth to water	1.00
Youngston, moist	20	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.04	Piping	0.65	Depth to water	1.00
127:							
Maudlin	50	Somewhat limited		Very limited		Very limited	
		Depth to bedrock	0.86	Piping	1.00	Depth to water	1.00
		Seepage	0.72	Thin layer	0.86		
				Seepage	0.10		

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
127:							
Duffymont	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
				Content of large stones	1.00		
				Seepage	0.10		
128:							
Maybell	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.98	Depth to water	1.00
129:							
Maybell	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.98	Depth to water	1.00
		Slope	0.45				
130:							
Maysprings	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.95	Depth to water	1.00
131:							
Maysprings	50	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.95	Depth to water	1.00
		Slope	0.03				
Gretdivid	30	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.91	Depth to water	1.00
		Slope	0.03				
132:							
Milren	80	Not limited		Somewhat limited		Very limited	
				Piping	0.03	Depth to water	1.00
133:							
Miracle	50	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Depth to bedrock	0.61	Thin layer	0.61		
				Seepage	0.03		
Coldspring	30	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Depth to bedrock	0.19	Thin layer	0.19		
				Seepage	0.06		
134:							
Morapos	85	Not limited		Somewhat limited		Very limited	
				Piping	0.08	Depth to water	1.00
135:							
Morapos	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.10	Piping	0.08	Depth to water	1.00
136:							
Morapos	40	Not limited		Somewhat limited		Very limited	
				Piping	0.01	Depth to water	1.00
Pagoda	40	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.02	Piping	0.33	Depth to water	1.00

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
137:							
Morset	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
				Seepage	0.03		
Youga	30	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.09	Depth to water	1.00
138:							
Moyerson	50	Somewhat limited		Very limited		Very limited	
		Depth to bedrock	0.58	Thin layer	1.00	Depth to water	1.00
		Slope	0.50	Hard to pack	0.10		
Rentsac	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.50	Seepage	0.19		
				Content of large stones	0.08		
139:							
Muggins	85	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.04	Piping	0.26	Depth to water	1.00
		Slope	0.01				
140:							
Ninot	50	Somewhat limited		Not limited		Very limited	
		Seepage	0.72			Depth to water	1.00
		Slope	0.50				
Crago	20	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Seepage	0.69	Depth to water	1.00
		Slope	0.50				
Garlips	15	Somewhat limited		Very limited		Very limited	
		Slope	0.50	Piping	1.00	Depth to water	1.00
		Seepage	0.04				
141:							
Nortez, cool	50	Somewhat limited		Somewhat limited		Very limited	
		Depth to bedrock	0.86	Thin layer	0.86	Depth to water	1.00
Morapos	40	Not limited		Somewhat limited		Very limited	
				Piping	0.08	Depth to water	1.00
142:							
Nortez, cool	50	Somewhat limited		Somewhat limited		Very limited	
		Depth to bedrock	0.86	Thin layer	0.86	Depth to water	1.00
		Slope	0.10				
Morapos	40	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.10	Piping	0.08	Depth to water	1.00
143:							
Nunemaker	90	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
				Seepage	0.03		

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
144:							
Pagoda	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.10	Piping	0.37	Depth to water	1.00
		Seepage	0.02				
145:							
Pagoda	85	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.02	Piping	0.25	Depth to water	1.00
146:							
Pavillion	60	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.04	Piping	0.92	Depth to water	1.00
		Depth to bedrock	0.03	Thin layer	0.66		
		Slope	0.01				
Degater	25	Somewhat limited		Somewhat limited		Very limited	
		Depth to bedrock	0.11	Thin layer	0.86	Depth to water	1.00
		Slope	0.01				
147:							
Peeler	85	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Seepage	0.05	Depth to water	1.00
		Slope	0.03				
148:							
Pilotpeak	45	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
				Seepage	0.38		
Grubrob	35	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.91	Depth to water	1.00
		Depth to bedrock	0.91	Seepage	0.10		
149:							
Pinelli	85	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.04	Piping	0.54	Depth to water	1.00
150:							
Pinelli	85	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.04	Piping	0.37	Depth to water	1.00
				Seepage	0.02		
151:							
Pinelli, dry	85	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.04	Piping	0.57	Depth to water	1.00
				Seepage	0.01		
152:							
Pinridge	85	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
				Seepage	0.09		
153:							
Pricecreek	85	Not limited		Somewhat limited		Very limited	
				Piping	0.98	Depth to water	1.00
154:							
Quealman	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.08	Depth to water	1.00

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
155:							
Rencot	50	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.01	Content of large stones	1.00		
Duffymont	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.01	Content of large stones	1.00		
				Seepage	0.10		
156:							
Rentsac	85	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.97	Seepage	0.19		
				Content of large stones	0.03		
157:							
Rentsac	40	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.97	Seepage	0.19		
				Content of large stones	0.12		
Moyerson	35	Somewhat limited		Very limited		Very limited	
		Slope	0.97	Thin layer	1.00	Depth to water	1.00
		Depth to bedrock	0.58	Hard to pack	0.10		
158:							
Rock outcrop	70	Very limited		Not rated		Not rated	
		Slope	1.00				
		Depth to bedrock	1.00				
Earsman	20	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.41	Content of large stones	1.00		
				Seepage	0.09		
159:							
Rock outcrop	50	Very limited		Not rated		Not rated	
		Depth to bedrock	1.00				
		Slope	1.00				
Haploborolls	35	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.98	Depth to water	1.00
		Depth to bedrock	0.98	Seepage	0.09		
		Slope	0.28				
160:							
Rock outcrop	70	Very limited		Not rated		Not rated	
		Slope	1.00				
		Depth to bedrock	1.00				

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
160:							
Torriorthents	25	Very limited		Very limited		Very limited	
		Slope	1.00	Thin layer	1.00	Depth to water	1.00
		Depth to bedrock	1.00	Content of large stones	0.79		
				Seepage	0.09		
161:							
Rock River	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.09	Depth to water	1.00
162:							
Rock River	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.09	Depth to water	1.00
163:							
Rock River	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.09	Depth to water	1.00
		Slope	0.10				
164:							
Rock River	50	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.09	Depth to water	1.00
		Slope	0.01				
Taffom	25	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.38	Depth to water	1.00
		Slope	0.01				
165:							
Rogrube sandy loam	50	Somewhat limited		Very limited		Very limited	
		Seepage	0.04	Piping	1.00	Depth to water	1.00
Rogrube clay loam	25	Somewhat limited		Very limited		Very limited	
		Seepage	0.04	Piping	1.00	Depth to water	1.00
166:							
Routt	80	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.85	Depth to water	1.00
		Slope	0.02				
167:							
Routt	30	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.76	Depth to water	1.00
		Slope	0.12				
Cochetopa	25	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.54	Piping	0.01	Depth to water	1.00
		Slope	0.12				
Binco	20	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.12	Piping	0.01	Depth to water	1.00
168:							
Ruedloff	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.39	Depth to water	1.00

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
169:							
Ruedloff	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.93	Depth to water	1.00
		Slope	0.03				
Dunul	30	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.37	Depth to water	1.00
		Slope	0.03				
170:							
Ryan Park	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.39	Depth to water	1.00
171:							
Ryan Park	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
172:							
Ryan Park	50	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.39	Depth to water	1.00
		Slope	0.03				
Coyet	30	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.39	Depth to water	1.00
		Slope	0.03				
173:							
Ryark	65	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
Powderwash	20	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.58	Depth to water	1.00
		Depth to bedrock	0.02				
174:							
Ryark	70	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
Maybell	15	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.98	Depth to water	1.00
175:							
Sandwash	40	Somewhat limited		Very limited		Very limited	
		Depth to bedrock	0.99	Piping	1.00	Depth to water	1.00
		Seepage	0.72	Thin layer	0.99		
Langspring	30	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.92	Depth to water	1.00
				Seepage	0.09		
Baston	20	Somewhat limited		Very limited		Very limited	
		Depth to bedrock	0.17	Piping	1.00	Depth to water	1.00
				Thin layer	0.91		
				Salinity	0.12		
176:							
Schooner	50	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.28	Seepage	0.15		

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
176:							
Rock outcrop--------	35	Very limited		Not rated		Not rated	
		Depth to bedrock	1.00				
		Slope	0.28				
177:							
Schooner----------	55	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.03	Seepage	0.15		
Tricera----------	25	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	0.99	Depth to water	1.00
178:							
Simanni----------	50	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.35	Depth to water	1.00
Ruedloff----------	40	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.39	Depth to water	1.00
179:							
Skyway, dry---------	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.83	Depth to water	1.00
		Slope	0.97	Seepage	0.10		
		Depth to bedrock	0.83				
180:							
Spool----------	55	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.21	Seepage	0.32		
Maybell----------	30	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.98	Depth to water	1.00
181:							
Stunner----------	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.27	Depth to water	1.00
182:							
Stunner, moist------	55	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
				Seepage	0.09		
Emlin----------	35	Somewhat limited		Very limited		Very limited	
		Seepage	0.04	Piping	1.00	Depth to water	1.00
183:							
Styers----------	45	Somewhat limited		Somewhat limited		Very limited	
		Depth to bedrock	0.04	Hard to pack	0.70	Depth to water	1.00
		Slope	0.03	Thin layer	0.70		
Ironsprings---------	25	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.39	Depth to water	1.00
		Slope	0.03				
Maysprings----------	15	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.95	Depth to water	1.00
		Slope	0.03				

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
184:							
Styers	40	Somewhat limited		Somewhat limited		Very limited	
		Depth to bedrock	0.17	Thin layer	0.91	Depth to water	1.00
		Slope	0.08	Hard to pack	0.68		
Pinelli	20	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.08	Piping	0.54	Depth to water	1.00
		Seepage	0.04				
Taffom	15	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.38	Depth to water	1.00
		Slope	0.08				
185:							
Taffom	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.04	Depth to water	1.00
186:							
Talamantes	85	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
				Seepage	0.09		
187:							
Talamantes	90	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Slope	0.01	Seepage	0.09		
188:							
Talamantes, saline	85	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.91	Depth to water	1.00
				Salinity	0.50		
189:							
Tipper	55	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.91	Depth to water	1.00
		Slope	0.28	Seepage	0.33		
		Depth to bedrock	0.17				
Crustown	35	Somewhat limited		Very limited		Very limited	
		Depth to bedrock	0.84	Thin layer	1.00	Depth to water	1.00
		Slope	0.28	Seepage	0.37		
190:							
Tipperary	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
		Slope	0.01				
191:							
Tipperary	90	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.32	Depth to water	1.00
192:							
Tipperary	50	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.32	Depth to water	1.00
Willwood	40	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.62	Depth to water	1.00

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
193:							
Tisworth	85	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
				Salinity	0.50		
194:							
Tolman	50	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.12	Content of large stones	1.00		
				Seepage	0.05		
Duffymont	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.12	Content of large stones	1.00		
				Seepage	0.10		
195:							
Torriorthents	95	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.10	Piping	1.00		
				Content of large stones	0.54		
196:							
Torriorthents	50	Somewhat limited		Very limited		Very limited	
		Depth to bedrock	0.90	Thin layer	1.00	Depth to water	1.00
				Piping	1.00		
				Content of large stones	0.54		
Baston	35	Somewhat limited		Very limited		Very limited	
		Depth to bedrock	0.17	Piping	1.00	Depth to water	1.00
				Thin layer	0.91		
				Salinity	0.12		
197:							
Torriorthents	60	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	1.00	Content of large stones	0.66		
Rock outcrop, sandstone	30	Very limited		Not rated		Not rated	
		Depth to bedrock	1.00				
		Slope	1.00				
198:							
Torriorthents	60	Somewhat limited		Very limited		Very limited	
		Depth to bedrock	0.90	Thin layer	1.00	Depth to water	1.00
		Slope	0.88	Piping	1.00		
				Salinity	0.12		
Rock outcrop, Shale	40	Very limited		Not rated		Not rated	
		Slope	1.00				
		Depth to bedrock	1.00				

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
199:							
Torriorthents-------	60	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.32	Piping	0.84		
Torripsamments------	30	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.95	Depth to water	1.00
		Depth to bedrock	0.95	Seepage	0.41		
		Slope	0.32				
200:							
Tresano-------------	80	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
				Seepage	0.09		
201:							
Tresano-------------	35	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
Hiatha--------------	30	Somewhat limited		Very limited		Very limited	
		Depth to bedrock	0.69	Thin layer	1.00	Depth to water	1.00
		Slope	0.01	Hard to pack	0.02		
Kandaly-------------	15	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.21	Depth to water	1.00
				Piping	0.02		
202:							
Turzo---------------	90	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
203:							
Turzo, saline-------	90	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Salinity	1.00	Depth to water	1.00
				Piping	1.00		
204:							
Typic Natrargids----	80	Somewhat limited		Very limited		Very limited	
		Seepage	0.06	Piping	1.00	Depth to water	1.00
				Salinity	0.12		
				Seepage	0.02		
205:							
Uffens--------------	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
				Seepage	0.99		
206:							
Ustorthents,							
frigid-------------	55	Very limited		Very limited		Very limited	
		Slope	1.00	Content of large	1.00	Depth to water	1.00
		Seepage	1.00	stones			
		Depth to bedrock	0.91	Thin layer	0.91		
				Seepage	0.09		
Borolls-------------	35	Very limited		Very limited		Very limited	
		Slope	1.00	Piping	1.00	Depth to water	1.00
		Depth to bedrock	0.69	Thin layer	0.70		
		Seepage	0.04				

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
207:							
Vermillion----------	40	Somewhat limited		Somewhat limited		Very limited	
		Depth to bedrock	0.91	Thin layer	0.91	Depth to water	1.00
		Seepage	0.72				
		Slope	0.02				
Langspring----------	35	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.90	Depth to water	1.00
		Slope	0.02	Seepage	0.05		
208:							
Wallson-------------	50	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.10	Depth to water	1.00
Tricera-------------	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	0.99	Depth to water	1.00
209:							
Weed----------------	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.09	Depth to water	1.00
210:							
Willwood------------	55	Very limited		Very limited		Very limited	
		Seepage	1.00	Content of large stones	1.00	Depth to water	1.00
				Seepage	0.96		
Sheppard, cool------	35	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.25	Depth to water	1.00
211:							
Willwood------------	55	Very limited		Very limited		Very limited	
		Seepage	1.00	Content of large stones	1.00	Depth to water	1.00
		Slope	0.32	Seepage	0.96		
Tipperary-----------	35	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.32	Depth to water	1.00
		Slope	0.32				
212:							
Willwood------------	60	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.96	Depth to water	1.00
				Content of large stones	0.95		
Tipperary, cobbly substratum---------	25	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
213:							
Winevada------------	60	Somewhat limited		Very limited		Very limited	
		Depth to bedrock	0.96	Piping	1.00	Depth to water	1.00
		Seepage	0.72	Thin layer	0.96		
		Slope	0.02				
Splitro-------------	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.02	Seepage	0.10		

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
214:							
Winevada	60	Somewhat limited		Very limited		Very limited	
		Slope	0.97	Piping	1.00	Depth to water	1.00
		Depth to bedrock	0.95	Thin layer	0.95		
		Seepage	0.72				
Splitro	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.97	Seepage	0.10		
215:							
Winkleman	85	Not limited		Somewhat limited		Very limited	
				Depth to saturated zone	0.24	Slow refill	1.00
				Piping	0.15	Depth to water	0.38
						Cutbanks cave	0.10
216:							
Yamo	90	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
217:							
Yamo	90	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Slope	0.21				
218:							
Yellowwash	50	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
				Salinity	0.03		
Piezon	35	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
		Depth to bedrock	0.11	Thin layer	0.86		
219:							
Youga	90	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.99	Depth to water	1.00
				Seepage	0.05		
220:							
Youga	50	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.09	Depth to water	1.00
Dinnen	40	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.10	Depth to water	1.00
221:							
Youga	40	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.09	Depth to water	1.00
		Slope	0.72				
Gelkie	30	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.10	Depth to water	1.00
		Slope	0.72				
Clayburn, warm	20	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.09	Depth to water	1.00
		Slope	0.50				

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
222:							
Youngston, cool-----	90	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
223:							
Youngston, well drained----------	90	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.04	Piping	0.67	Depth to water	1.00
224:							
Zillion----------	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.97	Content of large stones	0.35	Depth to water	1.00
		Seepage	0.72	Seepage	0.06		
Barkelew, moist-----	25	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.97	Content of large stones	0.54	Depth to water	1.00
		Seepage	0.72	Seepage	0.04		
Grapit----------	20	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.97	Seepage	0.19	Depth to water	1.00
		Seepage	0.72				
225:							
Abracon----------	45	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
Solirec----------	40	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
				Seepage	0.05		
226:							
Arches----------	45	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Seepage	1.00	Depth to water	1.00
		Slope	0.21	Thin layer	1.00		
Mespun----------	20	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
		Slope	0.03				
Rock outcrop--------	20	Very limited		Not rated		Not rated	
		Depth to bedrock	1.00				
		Slope	1.00				
227:							
Bankard family------	55	Very limited		Very limited		Very limited	
		Seepage	1.00	Seepage	1.00	Depth to water	1.00
Cameo----------	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
				Seepage	0.16		
228:							
Bondman----------	50	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.21	Seepage	0.04		

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
228:							
Rock outcrop--------	35	Very limited		Not rated		Not rated	
		Depth to bedrock	1.00				
		Slope	0.21				
229:							
Cameo---------------	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
				Seepage	0.16		
230:							
Cragnot------------	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.90	Seepage	0.75	Depth to water	1.00
		Seepage	0.54	Content of large stones	0.19		
Pensore------------	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.90	Content of large stones	0.96		
				Seepage	0.75		
Grapit--------------	15	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Content of large stones	0.33	Depth to water	1.00
		Slope	0.95				
231:							
Green River---------	70	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Piping	0.78	Cutbanks cave	1.00
				Depth to saturated zone	0.43	Depth to water	0.25
						Salty water	0.06
				Seepage	0.10		
Fluvaquents---------	15	Very limited		Very limited		Very limited	
		Seepage	1.00	Ponding	1.00	Cutbanks cave	1.00
				Depth to saturated zone	1.00		
				Seepage	1.00		
232:							
Lakebench-----------	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
		Slope	0.08				
Strell--------------	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.08	Seepage	1.00		
233:							
Lakebench-----------	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
		Slope	0.08				
Yampa---------------	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Content of large stones	1.00	Depth to water	1.00
		Slope	0.08				
				Seepage	0.10		

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
234:							
Mantlemine	85	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
235:							
Mantlemine	55	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
Emlin	30	Somewhat limited		Very limited		Very limited	
		Seepage	0.04	Piping	1.00	Depth to water	1.00
236:							
Mido	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.37	Depth to water	1.00
237:							
Mikim loam	55	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Piping	0.90	Depth to water	1.00
Mikim silt loam	35	Somewhat limited		Very limited		Very limited	
		Seepage	0.54	Piping	1.00	Depth to water	1.00
238:							
Milok	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.10	Depth to water	1.00
239:							
Milok	45	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.10	Depth to water	1.00
		Slope	0.82				
Solirec	25	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
		Slope	0.28				
Strych	15	Very limited		Very limited		Very limited	
		Seepage	1.00	Content of large stones	1.00	Depth to water	1.00
		Slope	0.82				
240:							
Milok	70	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
		Slope	0.06				
Strych	20	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Content of large stones	0.93	Depth to water	1.00
		Slope	0.02	Seepage	0.38		
241:							
Pensore	60	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.24	Content of large stones	0.96		
				Seepage	0.75		

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
241:							
Roto	25	Very limited		Very limited		Very limited	
		Seepage	1.00	Thin layer	0.99	Depth to water	1.00
		Depth to bedrock	0.99	Seepage	0.69		
		Slope	0.24	Content of large stones	0.08		
242:							
Riverwash	85	Very limited		Not rated		Not rated	
		Seepage	1.00				
243:							
Rizno	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.02	Content of large stones	0.32		
				Seepage	0.10		
Windcomb	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.02	Seepage	0.19		
Anasazi	15	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Thin layer	0.98	Depth to water	1.00
		Depth to bedrock	0.98	Seepage	0.36		
		Slope	0.02				
244:							
Rock outcrop	60	Very limited		Not rated		Not rated	
		Slope	1.00				
		Depth to bedrock	1.00				
Hackling	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.41	Content of large stones	1.00		
				Seepage	0.09		
245:							
Rock outcrop	30	Very limited		Not rated		Not rated	
		Depth to bedrock	1.00				
		Slope	1.00				
Torriorthents	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	1.00	Seepage	0.12		
				Content of large stones	0.01		
Ustorthents	30	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Thin layer	0.77	Depth to water	1.00
		Depth to bedrock	0.77	Content of large stones	0.20		
		Seepage	0.54	Seepage	0.04		
246:							
Schoonover	55	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.02	Seepage	0.12		

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
246:							
Duffymont	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Content of large stones	1.00	Depth to water	1.00
		Slope	0.02	Thin layer	1.00		
				Seepage	0.09		
247:							
Stout	60	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.12	Seepage	0.09		
Rock outcrop	30	Very limited		Not rated		Not rated	
		Depth to bedrock	1.00				
		Slope	0.12				
248:							
Strych	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Content of large stones	1.00	Depth to water	1.00
		Slope	0.24				
Mellenthin	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.24	Content of large stones	1.00		
				Seepage	0.09		
249:							
Zillion	40	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.97	Content of large stones	0.72	Depth to water	1.00
		Seepage	0.72	Seepage	0.03		
Yampa	25	Very limited		Very limited		Very limited	
		Seepage	1.00	Content of large stones	1.00	Depth to water	1.00
		Slope	0.97	Seepage	0.10		
Clyl	20	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.97	Seepage	0.12	Depth to water	1.00
		Seepage	0.72	Content of large stones	0.03		
250:							
Abracon	85	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
251:							
Badland	60	Very limited		Very limited		Very limited	
		Slope	1.00	Thin layer	1.00	Depth to water	1.00
		Depth to bedrock	0.99	Piping	0.78		
				Salinity	0.50		
Renegade	25	Very limited		Very limited		Very limited	
		Seepage	1.00	Content of large stones	1.00	Depth to water	1.00
		Slope	1.00	Seepage	0.10		
		Depth to bedrock	0.01	Thin layer	0.01		

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
252:							
Bigtom	50	Somewhat limited		Very limited		Very limited	
		Slope	0.12	Content of large stones	1.00	Depth to water	1.00
		Seepage	0.04	Seepage	0.31		
Namlot	20	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Seepage	0.53	Content of large stones	0.97		
		Slope	0.41	Seepage	0.31		
Dokie	15	Very limited		Very limited		Very limited	
		Seepage	1.00	Content of large stones	1.00	Depth to water	1.00
		Slope	0.82	Seepage	0.12		
253:							
Clapper	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Seepage	0.12	Depth to water	1.00
		Slope	0.02	Piping	0.02		
254:							
Cliff	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Piping	0.60	Depth to water	1.00
				Seepage	0.10		
255:							
Clyl	45	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.72	Content of large stones	0.70	Depth to water	1.00
		Slope	0.41	Seepage	0.19		
Pinerid	40	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.06	Seepage	0.75		
256:							
Cortyzack	65	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	0.99	Depth to water	1.00
		Slope	0.02				
Diagulch	20	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
				Seepage	0.32		
257:							
Cortyzack	55	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	0.99	Depth to water	1.00
		Slope	0.02				
Duffymont	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Content of large stones	1.00	Depth to water	1.00
		Slope	0.02	Thin layer	1.00		
				Seepage	0.09		

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
258:							
Cortyzack	45	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	0.99	Depth to water	1.00
		Slope	0.02				
Flynncove	45	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Content of large stones	0.93	Depth to water	1.00
		Slope	0.03	Seepage	0.31		
259:							
Denco	45	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.03	Thin layer	0.61	Depth to water	1.00
		Depth to bedrock	0.02				
Gerst	40	Somewhat limited		Very limited		Very limited	
		Depth to bedrock	0.78	Thin layer	1.00	Depth to water	1.00
		Slope	0.18	Piping	1.00		
260:							
Dokie	70	Very limited		Very limited		Very limited	
		Seepage	1.00	Content of large stones	1.00	Depth to water	1.00
		Slope	0.82	Seepage	0.12		
Flynncove	15	Somewhat limited		Very limited		Very limited	
		Slope	0.82	Content of large stones	1.00	Depth to water	1.00
		Seepage	0.72	Seepage	0.12		
261:							
Dokie	50	Very limited		Very limited		Very limited	
		Slope	1.00	Content of large stones	1.00	Depth to water	1.00
		Seepage	1.00	Seepage	0.12		
Namlot	40	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Seepage	0.53	Content of large stones	0.97		
		Slope	0.41	Seepage	0.31		
262:							
Gompers	85	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.03	Seepage	0.62		
				Piping	0.40		
263:							
Hanksville	85	Somewhat limited		Somewhat limited		Very limited	
		Depth to bedrock	0.06	Thin layer	0.77	Depth to water	1.00
		Slope	0.02	Piping	0.41		
				Salinity	0.03		
264:							
Mikim	85	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
265:							
Mikim	85	Somewhat limited		Very limited		Very limited	
		Seepage	0.54	Piping	1.00	Depth to water	1.00
266:							
Rock outcrop	40	Very limited		Not rated		Not rated	
		Depth to bedrock	1.00				
		Slope	0.50				
Boxring	25	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Content of large stones	1.00	Depth to water	1.00
		Slope	0.08	Thin layer	1.00		
				Seepage	0.31		
Tridell	25	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.82	Content of large stones	0.87	Depth to water	1.00
		Seepage	0.72				
267:							
Solirec	35	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
				Seepage	0.05		
Abracon	30	Somewhat limited		Very limited		Very limited	
		Seepage	0.72	Piping	1.00	Depth to water	1.00
Begay	20	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Piping	0.10	Depth to water	1.00
				Seepage	0.09		
268:							
Toliver	55	Very limited		Very limited		Very limited	
		Seepage	1.00	Content of large stones	1.00	Depth to water	1.00
		Slope	1.00	Seepage	0.09		
Rock outcrop	30	Very limited		Not rated		Not rated	
		Slope	1.00				
		Depth to bedrock	1.00				
269:							
Walknolls	60	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Slope	0.82	Seepage	0.62		
				Piping	0.40		
Badland	15	Somewhat limited		Very limited		Very limited	
		Depth to bedrock	0.99	Thin layer	1.00	Depth to water	1.00
		Slope	0.82	Piping	0.78		
				Salinity	0.50		
Rock outcrop	10	Very limited		Not rated		Not rated	
		Depth to bedrock	1.00				
		Slope	0.82				

Table 17.--Water management--Continued

Map symbol and soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
270:							
Walknolls	55	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Thin layer	1.00	Depth to water	1.00
		Seepage	0.54	Seepage	0.62		
		Slope	0.03	Piping	0.40		
Gilston	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Piping	1.00	Depth to water	1.00
		Seepage	1.00	Salinity	0.12		
				Seepage	0.09		
271:							
Water	95	Not rated		Not rated		Not rated	

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1:							
Abor	85	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Runoff limitation	0.40	Depth to bedrock	0.03		
		Depth to bedrock	0.03	Droughty	0.01		
		Droughty	0.01			Too steep for sprinkler application	1.00
						Depth to bedrock	0.03
						Droughty	0.01
2:							
Abor	80	Very limited		Very limited		Very limited	
		Slope	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Restricted permeability	1.00	Slope	1.00	Too steep for surface application	1.00
		Runoff limitation	0.40	Depth to bedrock	0.03		
		Depth to bedrock	0.03	Droughty	0.01		
		Droughty	0.01			Too steep for sprinkler application	1.00
						Depth to bedrock	0.03
						Droughty	0.01
3:							
Adderton	90	Not limited		Somewhat limited		Somewhat limited	
				Flooding	0.40	Too steep for surface application	0.68
4:							
Almy	90	Somewhat limited		Somewhat limited		Very limited	
		Restricted permeability	0.41	Restricted permeability	0.31	Too steep for surface application	1.00
		Slope	0.04	Slope	0.04		
						Restricted permeability	0.31
						Too steep for sprinkler application	0.22
5:							
Apmay	90	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Depth to saturated zone	0.95	Depth to saturated zone	0.95	Depth to saturated zone	0.95
				Flooding	0.40		

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
6:							
Avalon	45	Somewhat limited		Somewhat limited		Somewhat limited	
		Restricted permeability	0.41	Restricted permeability	0.31	Too steep for surface application	0.92
		Filtering capacity	0.01	Filtering capacity	0.01	Restricted permeability	0.31
						Too steep for sprinkler application	0.02
						Filtering capacity	0.01
Mack	45	Somewhat limited		Somewhat limited		Somewhat limited	
		Restricted permeability	0.41	Restricted permeability	0.31	Too steep for surface application	0.92
						Restricted permeability	0.31
						Too steep for sprinkler application	0.02
7:							
Avalon	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Restricted permeability	0.41	Restricted permeability	0.31	Too steep for surface application	0.92
						Restricted permeability	0.31
						Too steep for sprinkler application	0.02
Persayo, moist	25	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
Degater	20	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Runoff limitation	0.40	Droughty	0.08	Too steep for sprinkler application	1.00
		Droughty	0.08	Depth to bedrock	0.01	Droughty	0.08
		Depth to bedrock	0.01			Depth to bedrock	0.01
8:							
Badland	90	Not rated		Not rated		Not rated	

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
9:							
Baroid	55	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Leaching limitation	0.45	Flooding	0.40	Sodium content	0.32
		Sodium content	0.32	Sodium content	0.32	Salinity	0.13
		Salinity	0.06	Salinity	0.13	Droughty	0.03
		Droughty	0.03	Droughty	0.03		
Eghelm	35	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Salinity	0.06	Flooding	0.40	Filtering capacity	0.01
		Filtering capacity	0.01	Filtering capacity	0.01		
10:							
Battlement	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Filtering capacity	0.01	Flooding	0.40	Filtering capacity	0.01
				Filtering capacity	0.01		
11:							
Battlement, saline	80	Somewhat limited		Somewhat limited		Somewhat limited	
		Salinity	0.78	Flooding	0.40	Restricted permeability	0.31
		Restricted permeability	0.41	Restricted permeability	0.31	Sodium content	0.02
		Sodium content	0.02	Sodium content	0.02		
12:							
Berlake	85	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	0.01	Droughty	0.01	Too steep for surface application	1.00
						Too steep for sprinkler application	0.10
						Droughty	0.01
13:							
Berlake	85	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Droughty	0.01	Droughty	0.01		
						Too steep for sprinkler application	1.00
						Droughty	0.01

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
14:							
Berlake	55	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
						Too steep for surface application	1.00
						Too steep for sprinkler application	0.10
Maysprings	30	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	0.15	Droughty	0.15	Too steep for surface application	1.00
						Droughty	0.15
						Too steep for sprinkler application	0.10
15:							
Berlake	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Filtering capacity	0.01	Filtering capacity	0.01		
						Too steep for sprinkler application	1.00
						Filtering capacity	0.01
Taffom	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Filtering capacity	0.01	Filtering capacity	0.01		
						Too steep for sprinkler application	1.00
						Filtering capacity	0.01
Gretdivid	15	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Droughty	0.95	Droughty	0.95		
						Too steep for sprinkler application	1.00
						Droughty	0.95
16:							
Bilhil	85	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
17:							
Binco	90	Very limited		Very limited		Very limited	
		Slope	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Restricted permeability	1.00	Slope	1.00	Too steep for surface application	1.00
		Cobble content	0.50	Cobble content	0.50		
		Runoff limitation	0.40	Large stones on the surface	0.18	Too steep for sprinkler application	1.00
		Cobble content	0.50				
		Too stony	0.19			Cobble content	0.50
						Large stones on the surface	0.18
18:							
Boltus	50	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Runoff limitation	0.40	Sodium content	0.02	Too steep for surface application	0.92
		Salinity	0.06				
						Too steep for sprinkler application	0.02
Beamton	25	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Runoff limitation	0.40	Droughty	0.35	Too steep for surface application	0.92
		Droughty	0.35	Depth to bedrock	0.20		
		Depth to bedrock	0.20	Sodium content	0.02	Droughty	0.35
		Sodium content	0.02			Depth to bedrock	0.20
						Too steep for sprinkler application	0.02
19:							
Borollic Natrargids	40	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Salinity	0.50	Filtering capacity	0.01	Filtering capacity	0.01
		Runoff limitation	0.40				
		Filtering capacity	0.01				

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
19:							
Borollic Haplargids---------	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Too steep for surface application	1.00
		Restricted permeability	0.41	Restricted permeability	0.31	Too steep for sprinkler application	0.78
						Restricted permeability	0.31
Ustic Torrifluvents------	25	Somewhat limited		Somewhat limited		Somewhat limited	
		Filtering capacity	0.01	Flooding	0.40	Filtering capacity	0.01
				Filtering capacity	0.01		
20:							
Brownsto------------	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Too steep for surface application	1.00
		Droughty	0.12	Droughty	0.12	Too steep for sprinkler application	0.98
						Droughty	0.12
Castee--------------	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Too steep for surface application	1.00
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	0.98
						Filtering capacity	0.01
21:							
Bulkley-------------	80	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Restricted permeability	1.00	Restricted permeability	1.00		
		Large stones on the surface	0.92	Large stones on the surface	0.92	Too steep for sprinkler application	1.00
		Runoff limitation	0.40			Restricted permeability	1.00
						Large stones on the surface	0.92

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
22:							
Bulkley	80	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Runoff limitation	0.40			Too steep for surface application	1.00
						Too steep for sprinkler application	0.10
23:							
Bulkley	90	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Runoff limitation	0.40			Too steep for sprinkler application	1.00
24:							
Bulkley	60	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Cobble content	0.50	Cobble content	0.50	Too steep for sprinkler application	1.00
		Runoff limitation	0.40			Cobble content	0.50
		Cobble content	0.50				
Quilt	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Restricted permeability	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	1.00
25:							
Campspass	90	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
						Too steep for surface application	1.00
						Too steep for sprinkler application	0.10

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
26:							
Campspass	90	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Slope	1.00	Slope	1.00	Restricted permeability	1.00
						Too steep for sprinkler application	1.00
27:							
Canlodore	95	Very limited		Very limited		Very limited	
		Slope	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Filtering capacity	1.00	Slope	1.00	Too steep for surface application	1.00
		Droughty	1.00	Droughty	1.00		
		Leaching limitation	0.45	Too acid	0.42	Too steep for sprinkler application	1.00
		Too acid	0.11			Droughty	1.00
						Too acid	0.42
28:							
Carbol	40	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
						Too steep for surface application	0.68
Irigul	25	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	0.96	Slope	0.96	Too steep for surface application	1.00
		Runoff limitation	0.40			Too steep for sprinkler application	0.98
Rock outcrop	25	Not rated		Not rated		Not rated	
29:							
Carbol	45	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
						Too steep for surface application	1.00
						Too steep for sprinkler application	0.10

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
29:							
Miracle	30	Somewhat limited		Somewhat limited		Very limited	
		Droughty	0.04	Droughty	0.04	Too steep for surface application	1.00
		Depth to bedrock	0.03	Depth to bedrock	0.03	Too steep for sprinkler application	0.10
		Filtering capacity	0.01	Filtering capacity	0.01	Droughty	0.04
						Depth to bedrock	0.03
						Filtering capacity	0.01
30:							
Carmody	35	Very limited		Very limited		Very limited	
		Droughty	1.00	Droughty	1.00	Too steep for surface application	1.00
		Depth to bedrock	0.95	Depth to bedrock	0.95	Droughty	1.00
		Slope	0.37	Slope	0.37	Depth to bedrock	0.95
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	0.60
						Filtering capacity	0.01
Rock River	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Slope	0.37	Too steep for surface application	1.00
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	0.60
						Filtering capacity	0.01
Crestman	20	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Droughty	1.00	Droughty	1.00
		Depth to bedrock	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Runoff limitation	0.40	Slope	0.37	Too steep for surface application	1.00
		Slope	0.37			Too steep for sprinkler application	0.60

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
31:							
Castee	90	Somewhat limited		Somewhat limited		Very limited	
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for surface application	1.00
						Too steep for sprinkler application	0.10
						Filtering capacity	0.01
32:							
Chroder	80	Somewhat limited		Somewhat limited		Very limited	
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for surface application	1.00
						Too steep for sprinkler application	0.10
						Filtering capacity	0.01
33:							
Clayburn, warm	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Too steep for surface application	1.00
		Restricted permeability	0.41	Restricted permeability	0.31		
						Too steep for sprinkler application	0.98
						Restricted permeability	0.31
34:							
Clayburn	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Filtering capacity	0.01	Filtering capacity	0.01		
						Too steep for sprinkler application	1.00
						Filtering capacity	0.01
Foidel	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Filtering capacity	0.01	Filtering capacity	0.01		
						Too steep for sprinkler application	1.00
						Filtering capacity	0.01

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
35:							
Clayburn	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Restricted permeability	0.41	Restricted permeability	0.31	Too steep for sprinkler application	1.00
						Restricted permeability	0.31
Youga, moist	35	Very limited		Very limited		Very limited	
		Slope	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Filtering capacity	1.00	Slope	1.00	Too steep for surface application	1.00
		Restricted permeability	0.41	Too acid	0.42	Too steep for sprinkler application	1.00
		Too acid	0.11	Restricted permeability	0.31	Too acid	0.42
						Restricted permeability	0.31
36:							
Clifsand	60	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	0.78	Droughty	0.78	Too steep for surface application	1.00
						Droughty	0.78
						Too steep for sprinkler application	0.10
Chroder	30	Somewhat limited		Somewhat limited		Very limited	
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for surface application	1.00
						Too steep for sprinkler application	0.10
						Filtering capacity	0.01
37:							
Cochetopa	85	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Slope	1.00	Slope	1.00	Restricted permeability	1.00
						Too steep for sprinkler application	1.00

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
38:							
Cochetopa	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Restricted permeability	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	1.00
39:							
Cochetopa, warm	85	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
						Too steep for surface application	1.00
						Too steep for sprinkler application	0.10
40:							
Cochetopa	45	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Slope	0.84	Slope	0.84	Restricted permeability	1.00
						Too steep for sprinkler application	0.90
Gothic	40	Very limited		Very limited		Very limited	
		Slope	1.00	Large stones on the surface	1.00	Large stones on the surface	1.00
		Large stones on the surface	1.00	Slope	1.00	Too steep for surface application	1.00
		Restricted permeability	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	1.00
41:							
Cochetopa	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Restricted permeability	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
		Large stones on the surface	1.00	Large stones on the surface	1.00	Restricted permeability	1.00
						Large stones on the surface	1.00

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
41:							
Gothic	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Restricted permeability	1.00	Restricted permeability	1.00		
		Large stones on the surface	0.92	Large stones on the surface	0.92	Too steep for sprinkler application	1.00
						Restricted permeability	1.00
						Large stones on the surface	0.92
42:							
Cochetopa	50	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Slope	0.04	Slope	0.04	Too steep for surface application	1.00
						Too steep for sprinkler application	0.22
Jerry	35	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Large stones on the surface	1.00	Large stones on the surface	1.00	Large stones on the surface	1.00
		Cobble content	0.04	Cobble content	0.04	Too steep for surface application	1.00
		Slope	0.04	Slope	0.04		
						Too steep for sprinkler application	0.22
						Cobble content	0.04
43:							
Coldspring, moist	80	Not limited		Not limited		Very limited	
						Too steep for surface application	1.00
						Too steep for sprinkler application	0.10
44:							
Cowestglen	80	Somewhat limited		Somewhat limited		Somewhat limited	
		Sodium content	0.08	Flooding	0.40	Sodium content	0.08
		Filtering capacity	0.01	Sodium content	0.08	Filtering capacity	0.01
				Filtering capacity	0.01		

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
45:							
Coyet	90	Somewhat limited		Somewhat limited		Very limited	
		Leaching limitation	0.45	Droughty	0.10	Too steep for surface application	1.00
		Droughty	0.10	Filtering capacity	0.01	Droughty	0.10
		Filtering capacity	0.01			Too steep for sprinkler application	0.10
						Filtering capacity	0.01
46:							
Coyet	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Leaching limitation	0.45	Droughty	0.10	Too steep for sprinkler application	1.00
		Droughty	0.10	Filtering capacity	0.01	Droughty	0.10
		Filtering capacity	0.01			Filtering capacity	0.01
47:							
Coyet	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Droughty	0.68	Droughty	0.68	Too steep for sprinkler application	1.00
		Leaching limitation	0.45	Filtering capacity	0.01	Droughty	0.68
		Filtering capacity	0.01			Filtering capacity	0.01
Crestman, moist	35	Very limited		Very limited		Very limited	
		Slope	1.00	Droughty	1.00	Droughty	1.00
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Slope	1.00	Too steep for surface application	1.00
		Runoff limitation	0.40			Too steep for sprinkler application	1.00
48:							
Crago	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Droughty	0.63	Droughty	0.63	Too steep for sprinkler application	1.00
		Cobble content	0.50	Cobble content	0.50	Droughty	0.63
						Cobble content	0.50

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
48:							
Pensore	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Runoff limitation	0.40			Too steep for sprinkler application	1.00
Grapit	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Restricted permeability	0.41	Restricted permeability	0.31	Too steep for sprinkler application	1.00
						Restricted permeability	0.31
49:							
Cryoborolls, slumped	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Restricted permeability	0.41	Restricted permeability	0.31	Too steep for sprinkler application	1.00
						Restricted permeability	1.00
50:							
Cushool	85	Somewhat limited		Somewhat limited		Very limited	
		Droughty	0.84	Droughty	0.84	Too steep for surface application	1.00
		Depth to bedrock	0.84	Depth to bedrock	0.84	Droughty	0.84
		Filtering capacity	0.01	Filtering capacity	0.01	Depth to bedrock	0.84
						Too steep for sprinkler application	0.10
						Filtering capacity	0.01
51:							
Cushool	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Droughty	0.84	Droughty	0.84	Too steep for sprinkler application	1.00
		Depth to bedrock	0.84	Depth to bedrock	0.84	Droughty	0.84
		Filtering capacity	0.01	Filtering capacity	0.01	Depth to bedrock	0.84
						Filtering capacity	0.01

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
52:							
Danavore	45	Very limited		Very limited		Very limited	
		Droughty	1.00	Droughty	1.00	Droughty	1.00
		Cobble content	1.00	Cobble content	1.00	Cobble content	1.00
		Large stones on the surface	1.00	Large stones on the surface	1.00	Large stones on the surface	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	0.97	Depth to bedrock	0.97		
						Too steep for sprinkler application	1.00
Waybe	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Runoff limitation	0.40			Too steep for sprinkler application	1.00
53:							
Davtone	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Restricted permeability	0.41	Restricted permeability	0.31	Too steep for sprinkler application	1.00
						Restricted permeability	0.31
Forsey	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Droughty	0.81	Droughty	0.81		
		Cobble content	0.32	Cobble content	0.32		
		Large stones on the surface	0.18	Large stones on the surface	0.18	Too steep for sprinkler application	1.00
		Filtering capacity	0.01	Filtering capacity	0.01	Droughty	0.81
						Cobble content	0.32
						Large stones on the surface	0.18

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
54:							
Deaver	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Restricted permeability	1.00	Restricted permeability	1.00		
		Depth to bedrock	0.46	Depth to bedrock	0.46	Too steep for sprinkler application	1.00
		Droughty	0.46	Droughty	0.46		
		Sodium content	0.32	Sodium content	0.32	Restricted permeability	1.00
						Depth to bedrock	0.46
						Droughty	0.46
Avalon	30	Somewhat limited		Somewhat limited		Very limited	
		Restricted permeability	0.41	Restricted permeability	0.31	Too steep for surface application	1.00
		Slope	0.04	Slope	0.04		
						Restricted permeability	0.31
						Too steep for sprinkler application	0.22
55:							
Deaver	60	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Sodium content	0.32	Sodium content	0.32		
		Depth to bedrock	0.10	Depth to bedrock	0.10	Too steep for sprinkler application	1.00
		Droughty	0.07	Droughty	0.07		
						Sodium content	0.32
						Depth to bedrock	0.10
Chipeta	30	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Droughty	1.00	Droughty	1.00
		Depth to bedrock	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Sodium content	0.50	Sodium content	0.50		
						Too steep for sprinkler application	1.00
56:							
Debone	90	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Salinity	0.50				
		Runoff limitation	0.40				

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
57:							
Detra	50	Not limited		Not limited		Somewhat limited	
						Too steep for surface application	0.92
						Too steep for sprinkler application	0.02
Cortyzack	40	Somewhat limited		Somewhat limited		Somewhat limited	
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for surface application	0.92
						Too steep for sprinkler application	0.02
						Filtering capacity	0.01
58:							
Diaflats	45	Somewhat limited		Somewhat limited		Very limited	
		Depth to bedrock	0.80	Depth to bedrock	0.80	Too steep for surface application	1.00
		Droughty	0.67	Droughty	0.67		
		Slope	0.04	Slope	0.04	Depth to bedrock	0.80
						Droughty	0.67
						Too steep for sprinkler application	0.22
Fondillas	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Runoff limitation	0.40	Slope	0.04	Too steep for surface application	1.00
		Slope	0.04				
						Too steep for sprinkler application	0.22
59:							
Dranyon	90	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Slope	0.63	Slope	0.63	Too steep for surface application	1.00
		Restricted permeability	0.41	Too acid	0.42		
		Too acid	0.11	Restricted permeability	0.31	Too steep for sprinkler application	0.78
						Too acid	0.42
						Restricted permeability	0.31
60:							
Dumps, mine	100	Not rated		Not rated		Not rated	

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
61:							
Ecklund	50	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	1.00	Droughty	1.00	Droughty	1.00
		Depth to bedrock	0.06	Depth to bedrock	0.06	Too steep for surface application	0.92
						Depth to bedrock	0.06
						Too steep for sprinkler application	0.02
Tipperary	40	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Leaching limitation	0.45	Droughty	0.25	Too steep for surface application	0.92
		Droughty	0.25			Droughty	0.25
						Too steep for sprinkler application	0.02
62:							
Eghelm	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Filtering capacity	0.01	Flooding	0.40	Filtering capacity	0.01
				Filtering capacity	0.01		
63:							
Eghelm, moist	90	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	0.01	Flooding	0.40	Droughty	0.01
				Droughty	0.01		
64:							
Emlin	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Restricted permeability	0.41	Restricted permeability	0.31	Too steep for surface application	0.92
						Restricted permeability	0.31
						Too steep for sprinkler application	0.02
65:							
Emlin	65	Somewhat limited		Somewhat limited		Somewhat limited	
		Restricted permeability	0.41	Restricted permeability	0.31	Too steep for surface application	0.68
						Restricted permeability	0.31

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
65:							
Tymosling	20	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Large stones on the surface	0.18	Large stones on the surface	0.18	Too steep for surface application	1.00
		Slope	0.16	Slope	0.16		
		Depth to bedrock	0.10	Depth to bedrock	0.10	Too steep for sprinkler application	0.40
		Droughty	0.05	Droughty	0.05		
						Large stones on the surface	0.18
						Depth to bedrock	0.10
66:							
Evanot	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Restricted permeability	0.41	Restricted permeability	0.31	Too steep for surface application	0.92
						Restricted permeability	0.31
						Too steep for sprinkler application	0.02
67:							
Evanot	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Restricted permeability	0.41	Restricted permeability	0.31		
						Too steep for sprinkler application	1.00
						Restricted permeability	0.31
68:							
Evanot	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Too steep for surface application	1.00
		Restricted permeability	0.41	Restricted permeability	0.31		
						Too steep for sprinkler application	0.78
						Restricted permeability	0.31
Yamo	25	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Too steep for surface application	1.00
						Too steep for sprinkler application	0.78

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
69:							
Fenster	45	Not limited		Not limited		Very limited	
						Too steep for surface application	1.00
						Too steep for sprinkler application	0.10
Thenipel	30	Not limited		Not limited		Very limited	
						Too steep for surface application	1.00
						Too steep for sprinkler application	0.10
70:							
Fluvaquents, frequently flooded	50	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Runoff limitation	0.40				
Haplaquolls, frequently flooded	45	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Runoff limitation	0.40				
71:							
Flygare, dry	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Restricted permeability	0.41	Too acid	0.42		
		Too acid	0.11	Restricted permeability	0.31	Too steep for sprinkler application	1.00
		Droughty	0.01	Droughty	0.01		
						Too acid	0.42
						Restricted permeability	0.31
						Droughty	0.01
72:							
Foidel, cool	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Too steep for surface application	1.00
		Restricted permeability	0.41	Too acid	0.42		
		Too acid	0.11	Restricted permeability	0.31	Too steep for sprinkler application	0.98
						Too acid	0.42
						Restricted permeability	0.31

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
73:							
Foidel	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Restricted permeability	0.41	Too acid	0.42		
		Too acid	0.11	Restricted permeability	0.31	Too steep for sprinkler application	1.00
						Too acid	0.42
						Restricted permeability	0.31
74:							
Foidel, moist	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Too steep for surface application	1.00
		Restricted permeability	0.41	Too acid	0.42		
		Too acid	0.11	Restricted permeability	0.31	Too steep for sprinkler application	0.98
						Too acid	0.42
						Restricted permeability	0.31
Flygare	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Too steep for surface application	1.00
		Restricted permeability	0.41	Too acid	0.42		
		Too acid	0.11	Restricted permeability	0.31	Too steep for sprinkler application	0.98
		Droughty	0.01	Droughty	0.01		
						Too acid	0.42
						Restricted permeability	0.31
						Droughty	0.01
Skyway, moist	20	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Too steep for surface application	1.00
		Droughty	0.77	Droughty	0.77		
		Depth to bedrock	0.35	Depth to bedrock	0.35		
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	0.98
						Droughty	0.77
						Depth to bedrock	0.35
						Filtering capacity	0.01
75:							
Fonce	90	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	0.80	Droughty	0.80	Droughty	0.80
						Too steep for surface application	0.32

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
76:							
Fonce	90	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	0.44	Droughty	0.44	Too steep for surface application	1.00
						Droughty	0.44
						Too steep for sprinkler application	0.10
77:							
Forelle	85	Somewhat limited		Somewhat limited		Very limited	
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for surface application	1.00
						Too steep for sprinkler application	0.10
						Filtering capacity	0.01
78:							
Forelle	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	1.00
						Filtering capacity	0.01
79:							
Forelle	50	Somewhat limited		Somewhat limited		Somewhat limited	
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for surface application	0.92
						Too steep for sprinkler application	0.02
						Filtering capacity	0.01
Evanot	40	Somewhat limited		Somewhat limited		Somewhat limited	
		Restricted permeability	0.41	Restricted permeability	0.31	Too steep for surface application	0.92
						Restricted permeability	0.31
						Too steep for sprinkler application	0.02

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
80:							
Forelle	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	1.00
						Filtering capacity	0.01
Evanot	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Restricted permeability	0.41	Restricted permeability	0.31	Too steep for sprinkler application	1.00
						Restricted permeability	0.31
81:							
Forelle	40	Not limited		Not limited		Somewhat limited	
						Too steep for surface application	0.32
Obadia	35	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Runoff limitation	0.40	Filtering capacity	0.01	Too steep for surface application	0.32
		Filtering capacity	0.01			Filtering capacity	0.01
82:							
Forelle	30	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.84	Slope	0.84	Too steep for surface application	1.00
						Too steep for sprinkler application	0.90
Pinelli	30	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Slope	0.84	Slope	0.84	Too steep for surface application	1.00
						Too steep for sprinkler application	0.90

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
82:							
Maysprings----------	15	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Slope	0.84	Slope	0.84	Too steep for surface application	1.00
		Droughty	0.52	Droughty	0.52	Too steep for sprinkler application	0.90
						Droughty	0.52
83:							
Forsey--------------	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Too steep for surface application	1.00
		Droughty	0.81	Droughty	0.81		
		Cobble content	0.32	Cobble content	0.32		
		Large stones on the surface	0.18	Large stones on the surface	0.18	Too steep for sprinkler application	0.98
		Filtering capacity	0.01	Filtering capacity	0.01	Droughty	0.81
						Cobble content	0.32
						Large stones on the surface	0.18
Libeg---------------	30	Somewhat limited		Somewhat limited		Very limited	
		Droughty	0.10	Droughty	0.10	Too steep for surface application	1.00
		Slope	0.04	Slope	0.04	Too steep for sprinkler application	0.22
						Droughty	0.10
84:							
Gebson, moist-------	55	Very limited		Very limited		Very limited	
		Large stones on the surface	1.00	Large stones on the surface	1.00	Large stones on the surface	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Cobble content	0.04	Cobble content	0.04		
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	1.00
						Cobble content	0.04
						Filtering capacity	0.01
Youga---------------	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.16	Slope	0.16	Too steep for surface application	1.00
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	0.40
						Filtering capacity	0.01

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
85:							
Giarch	90	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Salinity	1.00	Sodium content	1.00	Sodium content	1.00
		Sodium content	1.00	Flooding	0.40		
		Runoff limitation	0.40				
86:							
Gracot	50	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Droughty	0.87	Droughty	0.87		
		Leaching limitation	0.45	Cobble content	0.04	Too steep for sprinkler application	1.00
		Cobble content	0.04			Droughty	0.87
						Cobble content	0.04
Maybell	30	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Leaching limitation	0.45	Droughty	0.21	Too steep for sprinkler application	1.00
		Droughty	0.21			Droughty	0.21
87:							
Gretdivid	35	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Droughty	0.95	Droughty	0.95	Too steep for sprinkler application	1.00
						Droughty	0.95
Taffom	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	1.00
						Filtering capacity	0.01

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
87:							
Abor	15	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	0.46	Depth to bedrock	0.46		
		Droughty	0.46	Droughty	0.46		
		Runoff limitation	0.40			Too steep for sprinkler application	1.00
						Depth to bedrock	0.46
						Droughty	0.46
88:							
Grieves	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for surface application	0.92
						Too steep for sprinkler application	0.02
						Filtering capacity	0.01
89:							
Grieves	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Filtering capacity	0.01	Filtering capacity	0.01		
						Too steep for sprinkler application	1.00
						Filtering capacity	0.01
90:							
Grieves	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Filtering capacity	0.01	Filtering capacity	0.01		
						Too steep for sprinkler application	1.00
						Filtering capacity	0.01
Crestman	35	Very limited		Very limited		Very limited	
		Slope	1.00	Droughty	1.00	Droughty	1.00
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Slope	1.00	Too steep for surface application	1.00
		Runoff limitation	0.40				
						Too steep for sprinkler application	1.00

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
91:							
Grieves	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	1.00
						Filtering capacity	0.01
Yamo	25	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.04	Slope	0.04	Too steep for surface application	1.00
						Too steep for sprinkler application	0.22
Crestman	20	Very limited		Very limited		Very limited	
		Slope	1.00	Droughty	1.00	Droughty	1.00
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Slope	1.00	Too steep for surface application	1.00
		Runoff limitation	0.40			Too steep for sprinkler application	1.00
92:							
Grimm	50	Very limited		Very limited		Very limited	
		Slope	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Filtering capacity	1.00	Slope	1.00	Too steep for surface application	1.00
		Droughty	1.00	Droughty	1.00	Too steep for sprinkler application	1.00
		Cobble content	1.00	Cobble content	1.00	Droughty	1.00
		Leaching limitation	0.45			Cobble content	1.00
Ustic Torriorthents, shallow	40	Very limited		Very limited		Very limited	
		Slope	1.00	Droughty	1.00	Droughty	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Slope	1.00	Too steep for surface application	1.00
		Cobble content	1.00	Cobble content	1.00	Too steep for sprinkler application	1.00
		Runoff limitation	0.40	Filtering capacity	0.01	Cobble content	1.00
93:							
Gullied land	85	Not rated		Not rated		Not rated	

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
94:							
Hapney, moist-------	90	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Salinity	0.78	Filtering capacity	0.01	Filtering capacity	0.01
		Runoff limitation	0.40				
		Filtering capacity	0.01				
95:							
Haterton----------	60	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Sodium content	0.32	Sodium content	0.32	Too steep for surface application	1.00
						Sodium content	0.32
						Too steep for sprinkler application	0.10
Piezon----------	30	Somewhat limited		Somewhat limited		Very limited	
		Depth to bedrock	0.95	Depth to bedrock	0.95	Too steep for surface application	1.00
		Droughty	0.75	Droughty	0.75	Depth to bedrock	0.95
						Droughty	0.75
						Too steep for sprinkler application	0.10
96:							
Heathcoat----------	85	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Large stones on the surface	1.00	Large stones on the surface	1.00	Large stones on the surface	1.00
						Too steep for surface application	0.08
97:							
Heathcoat----------	60	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Slope	0.84	Slope	0.84	Too steep for surface application	1.00
						Too steep for sprinkler application	0.90

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
97:							
Clayburn	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Restricted permeability	0.41	Restricted permeability	0.31	Too steep for sprinkler application	1.00
						Restricted permeability	0.31
98:							
Herm	50	Very limited		Very limited		Very limited	
		Large stones on the surface	1.00	Large stones on the surface	1.00	Too steep for surface application	1.00
		Restricted permeability	1.00	Restricted permeability	1.00	Large stones on the surface	1.00
		Slope	1.00	Slope	1.00	Restricted permeability	1.00
						Too steep for sprinkler application	1.00
Fughes	35	Very limited		Very limited		Very limited	
		Large stones on the surface	1.00	Large stones on the surface	1.00	Large stones on the surface	1.00
		Restricted permeability	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Slope	1.00	Slope	1.00	Restricted permeability	1.00
						Too steep for sprinkler application	1.00
99:							
Hesperus, dry	85	Somewhat limited		Somewhat limited		Very limited	
		Restricted permeability	0.41	Restricted permeability	0.31	Too steep for surface application	1.00
		Slope	0.04	Slope	0.04	Restricted permeability	0.31
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	0.22
						Filtering capacity	0.01

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
100:							
Hesperus	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Restricted permeability	0.41	Restricted permeability	0.31	Too steep for sprinkler application	1.00
						Restricted permeability	0.31
101:							
Hesperus	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Too steep for surface application	1.00
		Restricted permeability	0.41	Restricted permeability	0.31	Too steep for sprinkler application	0.98
						Restricted permeability	0.31
102:							
Holter	55	Very limited		Very limited		Very limited	
		Large stones on the surface	1.00	Large stones on the surface	1.00	Large stones on the surface	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Restricted permeability	0.41	Droughty	0.35	Too steep for sprinkler application	1.00
		Droughty	0.35	Restricted permeability	0.31	Droughty	0.35
		Filtering capacity	0.01	Filtering capacity	0.01	Restricted permeability	0.31
Detra	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Restricted permeability	0.41	Restricted permeability	0.31	Too steep for surface application	0.92
		Filtering capacity	0.01	Filtering capacity	0.01	Restricted permeability	0.31
						Too steep for sprinkler application	0.02
						Filtering capacity	0.01
103:							
Iles	85	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
						Too steep for surface application	1.00
						Too steep for sprinkler application	0.10

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
104:							
Ironco	60	Very limited		Very limited		Very limited	
		Slope	1.00	Large stones on the surface	1.00	Large stones on the surface	1.00
		Large stones on the surface	1.00	Slope	1.00	Too steep for surface application	1.00
		Droughty	0.34	Droughty	0.34		
		Cobble content	0.12	Cobble content	0.12		
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	1.00
						Droughty	0.34
						Cobble content	0.12
Mulgon, dry	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Droughty	0.43	Droughty	0.43		
		Restricted permeability	0.41	Too acid	0.42		
		Too acid	0.11	Restricted permeability	0.31	Too steep for sprinkler application	1.00
		Filtering capacity	0.01	Filtering capacity	0.01		
						Droughty	0.43
						Too acid	0.42
						Restricted permeability	0.31
105:							
Ironsprings	85	Somewhat limited		Somewhat limited		Very limited	
		Droughty	0.17	Droughty	0.17	Too steep for surface application	1.00
		Filtering capacity	0.01	Filtering capacity	0.01		
						Droughty	0.17
						Too steep for sprinkler application	0.10
						Filtering capacity	0.01
106:							
Ironsprings	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Droughty	0.19	Droughty	0.19		
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	1.00
						Droughty	0.19
						Filtering capacity	0.01

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
107:							
Ironsprings	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Droughty	0.24	Droughty	0.24		
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	1.00
						Droughty	0.24
						Filtering capacity	0.01
Maysprings	25	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Droughty	0.03	Droughty	0.03		
						Too steep for sprinkler application	1.00
						Droughty	0.03
Gretdivid	15	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Droughty	0.95	Droughty	0.95		
						Too steep for sprinkler application	1.00
						Droughty	0.95
108:							
Jerry	50	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Too acid	0.11	Too acid	0.42		
						Too steep for sprinkler application	1.00
						Too acid	0.42
Cochetopa	35	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
						Too steep for sprinkler application	1.00

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
109:							
Joebas	60	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Runoff limitation	0.40	Filtering capacity	0.01		
		Filtering capacity	0.01			Too steep for sprinkler application	1.00
						Filtering	0.01
Rock outcrop	30	Not rated		Not rated		Not rated	
110:							
Kemmerer	80	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	0.97	Depth to bedrock	0.97		
		Droughty	0.90	Droughty	0.90	Too steep for sprinkler application	1.00
		Runoff limitation	0.40			Depth to bedrock	0.97
						Droughty	0.90
111:							
Kemmerer	50	Very limited		Very limited		Very limited	
		Slope	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Restricted permeability	1.00	Slope	1.00	Too steep for surface application	1.00
		Droughty	0.89	Droughty	0.89		
		Depth to bedrock	0.74	Depth to bedrock	0.74	Too steep for sprinkler application	1.00
		Runoff limitation	0.40			Droughty	0.89
						Depth to bedrock	0.74
Grapit	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Cobble content	0.98	Cobble content	0.98		
		Large stones on the surface	0.50	Large stones on the surface	0.50	Too steep for sprinkler application	1.00
		Droughty	0.01	Droughty	0.01	Cobble content	0.98
		Filtering capacity	0.01	Filtering capacity	0.01	Large stones on the surface	0.50
						Droughty	0.01

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
112:							
Kemmerer	45	Very limited		Very limited		Very limited	
		Slope	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Restricted permeability	1.00	Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	0.97	Depth to bedrock	0.97	Too steep for sprinkler application	1.00
		Droughty	0.90	Droughty	0.90	Depth to bedrock	0.97
		Runoff limitation	0.40			Droughty	0.90
Moyerson	40	Very limited		Very limited		Very limited	
		Slope	1.00	Droughty	1.00	Droughty	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Slope	1.00	Too steep for surface application	1.00
		Restricted permeability	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
		Runoff limitation	0.40			Restricted permeability	1.00
113:							
Kemmerer	60	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	0.97	Depth to bedrock	0.97	Too steep for sprinkler application	1.00
		Droughty	0.90	Droughty	0.90	Depth to bedrock	0.97
		Runoff limitation	0.40			Droughty	0.90
Yamo	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
114:							
Lamphier	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Too steep for surface application	1.00
		Too acid	0.11	Too acid	0.42	Too steep for sprinkler application	0.98
		Filtering capacity	0.01	Filtering capacity	0.01	Too acid	0.42
						Filtering capacity	0.01

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
115:							
Lamphier	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Too acid	0.11	Too acid	0.42		
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	1.00
						Too acid	0.42
						Filtering capacity	0.01
116:							
Lamphier	45	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Too steep for surface application	1.00
		Too acid	0.11	Too acid	0.42		
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	0.98
						Too acid	0.42
						Filtering capacity	0.01
Jerry	30	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Slope	0.96	Slope	0.96	Too steep for surface application	1.00
						Too steep for sprinkler application	0.98
117:							
Lamphier	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Too acid	0.11	Too acid	0.42		
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	1.00
						Too acid	0.42
						Filtering capacity	0.01
Jerry	30	Very limited		Very limited		Very limited	
		Slope	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Restricted permeability	1.00	Slope	1.00	Too steep for surface application	1.00
						Too steep for sprinkler application	1.00

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
118:							
Lander	85	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Depth to saturated zone	0.43	Depth to saturated zone	0.43	Depth to saturated zone	0.43
		Restricted permeability	0.41	Flooding	0.40	Restricted permeability	0.31
				Restricted permeability	0.31		
119:							
Langspring	85	Somewhat limited		Somewhat limited		Very limited	
		Sodium content	0.02	Sodium content	0.02	Too steep for surface application	1.00
						Too steep for sprinkler application	0.10
						Sodium content	0.02
120:							
Layoint	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Droughty	0.93	Droughty	0.93	Droughty	0.93
		Depth to bedrock	0.29	Depth to bedrock	0.29	Too steep for surface application	0.32
		Filtering capacity	0.01	Filtering capacity	0.01	Depth to bedrock	0.29
						Filtering capacity	0.01
Moosed	25	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Droughty	1.00	Droughty	1.00
		Depth to bedrock	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	0.37	Slope	0.37	Too steep for surface application	1.00
						Too steep for sprinkler application	0.60
Berlake	20	Somewhat limited		Somewhat limited		Very limited	
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for surface application	1.00
						Too steep for sprinkler application	0.10
						Filtering capacity	0.01

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
121:							
Leaps	90	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Too acid	0.11	Too acid	0.42	Too steep for surface application	1.00
		Slope	0.04	Slope	0.04	Too acid	0.42
						Too steep for sprinkler application	0.22
122:							
Leswill	50	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Salinity	0.78	Restricted permeability	0.31	Restricted permeability	0.31
		Restricted permeability	0.41			Too steep for surface application	0.08
Rogrube	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Restricted permeability	0.41	Restricted permeability	0.31	Restricted permeability	0.31
		Sodium content	0.18	Sodium content	0.18	Sodium content	0.18
		Salinity	0.06			Too steep for surface application	0.08
123:							
Lilsnake	45	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Droughty	1.00	Droughty	1.00
		Slope	0.63	Slope	0.63	Too steep for surface application	1.00
						Too steep for sprinkler application	0.78
Sandwash	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Droughty	0.89	Droughty	0.89	Too steep for surface application	0.92
		Depth to bedrock	0.10	Depth to bedrock	0.10	Droughty	0.89
						Depth to bedrock	0.10
						Too steep for sprinkler application	0.02

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
124:							
Losee	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Large stones on the surface	1.00	Large stones on the surface	1.00		
		Cobble content	0.50	Cobble content	0.50	Too steep for sprinkler application	1.00
		Droughty	0.45	Droughty	0.45		
		Filtering capacity	0.01	Filtering capacity	0.01	Large stones on the surface	1.00
						Cobble content	0.50
						Droughty	0.45
Thornburgh, dry	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Cobble content	1.00	Cobble content	1.00		
		Large stones on the surface	1.00	Large stones on the surface	1.00	Too steep for sprinkler application	1.00
		Droughty	0.45	Droughty	0.45		
		Filtering capacity	0.01	Filtering capacity	0.01	Cobble content	1.00
						Large stones on the surface	1.00
						Droughty	0.45
125:							
Massadona	85	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Runoff limitation	0.40			Too steep for surface application	0.68
126:							
Massadona	65	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Runoff limitation	0.40			Too steep for surface application	0.32
Youngston, moist	20	Somewhat limited		Somewhat limited		Somewhat limited	
		Restricted permeability	0.41	Flooding	0.40	Restricted permeability	0.31
		Sodium content	0.18	Restricted permeability	0.31	Sodium content	0.18
		Salinity	0.01	Sodium content	0.18		

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
127:							
Maudlin	50	Somewhat limited		Somewhat limited		Very limited	
		Droughty	0.60	Droughty	0.60	Too steep for surface application	1.00
		Depth to bedrock	0.46	Depth to bedrock	0.46		
		Slope	0.04	Slope	0.04	Droughty	0.60
		Filtering capacity	0.01	Filtering capacity	0.01	Depth to bedrock	0.46
						Too steep for sprinkler application	0.22
						Filtering capacity	0.01
Duffymont	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Large stones on the surface	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Large stones on the surface	1.00	Large stones on the surface	1.00
		Cobble content	0.50	Cobble content	0.50	Too steep for surface application	1.00
		Slope	0.04	Slope	0.04		
						Cobble content	0.50
128:							
Maybell	90	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Leaching limitation	0.45	Droughty	0.19	Too steep for surface application	1.00
		Droughty	0.19			Droughty	0.19
						Too steep for sprinkler application	0.10
129:							
Maybell	90	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Leaching limitation	0.45	Droughty	0.21		
		Droughty	0.21			Too steep for sprinkler application	1.00
						Droughty	0.21
130:							
Maysprings	85	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	0.09	Droughty	0.09	Too steep for surface application	1.00
						Too steep for sprinkler application	0.10
						Droughty	0.09

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
131:							
Maysprings	50	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Droughty	0.19	Droughty	0.19	Too steep for sprinkler application	1.00
						Droughty	0.19
Gretdivid	30	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Droughty	0.95	Droughty	0.95	Too steep for sprinkler application	1.00
						Droughty	0.95
132:							
Milren	80	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
						Too steep for surface application	0.32
133:							
Miracle	50	Somewhat limited		Somewhat limited		Very limited	
		Droughty	0.04	Droughty	0.04	Too steep for surface application	1.00
		Depth to bedrock	0.03	Depth to bedrock	0.03	Too steep for sprinkler application	0.10
		Filtering capacity	0.01	Filtering capacity	0.01	Droughty	0.04
						Depth to bedrock	0.03
						Filtering capacity	0.01
Coldspring	30	Not limited		Not limited		Very limited	
						Too steep for surface application	1.00
						Too steep for sprinkler application	0.10

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
134:							
Morapos	85	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
						Too steep for surface application	1.00
						Too steep for sprinkler application	0.10
135:							
Morapos	85	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Slope	1.00	Slope	1.00	Restricted permeability	1.00
						Too steep for sprinkler application	1.00
136:							
Morapos	40	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
						Too steep for surface application	0.92
						Too steep for sprinkler application	0.02
Pagoda	40	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
						Too steep for surface application	0.92
						Too steep for sprinkler application	0.02
137:							
Morset	50	Somewhat limited		Somewhat limited		Very limited	
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for surface application	1.00
						Too steep for sprinkler application	0.10
						Filtering capacity	0.01

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
137:							
Youga	30	Somewhat limited		Somewhat limited		Very limited	
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for surface application	1.00
						Too steep for sprinkler application	0.10
						Filtering capacity	0.01
138:							
Moyerson	50	Very limited		Very limited		Very limited	
		Slope	1.00	Droughty	1.00	Droughty	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Slope	1.00	Too steep for surface application	1.00
		Restricted permeability	1.00	Restricted permeability	1.00		
		Runoff limitation	0.40			Too steep for sprinkler application	1.00
						Restricted permeability	1.00
Rentsac	30	Very limited		Very limited		Very limited	
		Slope	1.00	Droughty	1.00	Droughty	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Slope	1.00	Too steep for surface application	1.00
		Runoff limitation	0.40	Filtering capacity	0.01		
		Filtering capacity	0.01			Too steep for sprinkler application	1.00
						Filtering capacity	0.01
139:							
Muggins	85	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Slope	0.63	Slope	0.63	Too steep for surface application	1.00
		Too acid	0.11	Too acid	0.42		
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	0.78
						Too acid	0.42
						Filtering capacity	0.01
140:							
Ninot	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
						Too steep for sprinkler application	1.00

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
140:							
Crago	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Droughty	0.60	Droughty	0.60		
		Cobble content	0.50	Cobble content	0.50	Too steep for sprinkler application	1.00
						Droughty	0.60
						Cobble content	0.50
Garlips	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Restricted permeability	0.41	Restricted permeability	0.31		
						Too steep for sprinkler application	1.00
						Restricted permeability	0.31
141:							
Nortez, cool	50	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Depth to bedrock	0.46	Depth to bedrock	0.46	Too steep for surface application	1.00
		Droughty	0.14	Droughty	0.14		
						Depth to bedrock	0.46
						Droughty	0.14
						Too steep for sprinkler application	0.10
Morapos	40	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
						Too steep for surface application	1.00
						Too steep for sprinkler application	0.10
142:							
Nortez, cool	50	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Slope	1.00	Slope	1.00		
		Depth to bedrock	0.46	Depth to bedrock	0.46	Restricted permeability	1.00
		Droughty	0.14	Droughty	0.14		
						Too steep for sprinkler application	1.00
						Depth to bedrock	0.46
						Droughty	0.14

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
142:							
Morapos	40	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Slope	1.00	Slope	1.00	Restricted permeability	1.00
						Too steep for sprinkler application	1.00
143:							
Nunemaker	90	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Runoff limitation	0.40			Too steep for surface application	1.00
						Too steep for sprinkler application	0.10
144:							
Pagoda	85	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Slope	1.00	Slope	1.00	Restricted permeability	1.00
						Too steep for sprinkler application	1.00
145:							
Pagoda	85	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
						Too steep for surface application	0.92
						Too steep for sprinkler application	0.02
146:							
Pavillion	60	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Too steep for surface application	1.00
		Restricted permeability	0.41	Restricted permeability	0.31	Too steep for sprinkler application	0.78
		Depth to bedrock	0.06	Depth to bedrock	0.06	Restricted permeability	0.31
						Depth to bedrock	0.06

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
146:							
Degater	25	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Droughty	0.71	Droughty	0.71	Too steep for surface application	1.00
		Slope	0.63	Slope	0.63		
		Depth to bedrock	0.46	Depth to bedrock	0.46		
		Runoff limitation	0.40			Too steep for sprinkler application	0.78
						Droughty	0.71
						Depth to bedrock	0.46
147:							
Peeler	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Too acid	0.11	Too acid	0.42		
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	1.00
						Too acid	0.42
						Filtering capacity	0.01
148:							
Pilotpeak	45	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Runoff limitation	0.40	Filtering capacity	0.01	Too steep for surface application	1.00
		Filtering capacity	0.01			Too steep for sprinkler application	0.10
						Filtering capacity	0.01
Grubrob	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Droughty	0.93	Droughty	0.93	Droughty	0.93
		Depth to bedrock	0.65	Depth to bedrock	0.65	Depth to bedrock	0.65
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for surface application	0.08
						Filtering capacity	0.01
149:							
Pinelli	85	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
						Too steep for surface application	1.00
						Too steep for sprinkler application	0.10

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
150:							
Pinelli----------	85	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Slope	0.04	Slope	0.04	Too steep for surface application	1.00
						Too steep for sprinkler application	0.22
151:							
Pinelli, dry--------	85	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
						Too steep for surface application	0.68
152:							
Pinridge----------	85	Not limited		Somewhat limited		Somewhat limited	
				Flooding	0.40	Too steep for surface application	0.92
						Too steep for sprinkler application	0.02
153:							
Pricecreek----------	85	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Runoff limitation	0.40	Sodium content	0.08	Sodium content	0.08
		Sodium content	0.08				
154:							
Quealman----------	90	Somewhat limited		Very limited		Somewhat limited	
		Flooding	0.60	Flooding	1.00	Flooding	0.60
		Filtering capacity	0.01	Filtering capacity	0.01	Filtering capacity	0.01
155:							
Rencot----------	50	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Cobble content	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Cobble content	1.00	Cobble content	1.00
		Slope	0.84	Slope	0.84	Too steep for surface application	1.00
		Runoff limitation	0.40			Too steep for sprinkler application	0.90

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
155:							
Duffymont	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Large stones on the surface	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Large stones on the surface	1.00	Large stones on the surface	1.00
		Slope	0.84	Slope	0.84	Too steep for surface application	1.00
		Cobble content	0.50	Cobble content	0.50		
						Too steep for sprinkler application	0.90
156:							
Rentsac	85	Very limited		Very limited		Very limited	
		Slope	1.00	Droughty	1.00	Droughty	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Slope	1.00	Too steep for surface application	1.00
		Runoff limitation	0.40	Filtering capacity	0.01		
		Filtering capacity	0.01			Too steep for sprinkler application	1.00
						Filtering capacity	0.01
157:							
Rentsac	40	Very limited		Very limited		Very limited	
		Slope	1.00	Droughty	1.00	Droughty	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Slope	1.00	Too steep for surface application	1.00
		Runoff limitation	0.40	Cobble content	0.12		
		Cobble content	0.12	Filtering capacity	0.01	Too steep for sprinkler application	1.00
						Cobble content	0.12
Moyerson	35	Very limited		Very limited		Very limited	
		Slope	1.00	Droughty	1.00	Droughty	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Slope	1.00	Too steep for surface application	1.00
		Restricted permeability	1.00	Restricted permeability	1.00		
		Runoff limitation	0.40			Too steep for sprinkler application	1.00
						Restricted permeability	1.00
158:							
Rock outcrop	70	Not rated		Not rated		Not rated	

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
158:							
Earsman	20	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Large stones on the surface	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Large stones on the surface	1.00	Large stones on the surface	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Cobble content	0.50	Cobble content	0.50		
						Too steep for sprinkler application	1.00
159:							
Rock outcrop	50	Not rated		Not rated		Not rated	
Haploborolls	35	Very limited		Very limited		Very limited	
		Droughty	1.00	Droughty	1.00	Too steep for surface application	1.00
		Slope	1.00	Slope	1.00		
		Depth to bedrock	0.90	Depth to bedrock	0.90	Droughty	1.00
		Runoff limitation	0.40	Filtering capacity	0.01	Too steep for sprinkler application	1.00
		Filtering capacity	0.01			Depth to bedrock	0.90
						Filtering capacity	0.01
160:							
Rock outcrop	70	Not rated		Not rated		Not rated	
Torriorthents	25	Very limited		Very limited		Very limited	
		Slope	1.00	Droughty	1.00	Droughty	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Slope	1.00	Too steep for surface application	1.00
		Runoff limitation	0.40	Cobble content	0.04		
		Cobble content	0.04	Filtering capacity	0.01	Too steep for sprinkler application	1.00
						Cobble content	0.04
161:							
Rock River	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Filtering capacity	0.01	Filtering capacity	0.01	Filtering capacity	0.01
162:							
Rock River	85	Somewhat limited		Somewhat limited		Very limited	
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for surface application	1.00
						Too steep for sprinkler application	0.10
						Filtering capacity	0.01

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
163:							
Rock River----------	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	1.00
						Filtering capacity	0.01
164:							
Rock River----------	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Too steep for surface application	1.00
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	0.78
						Filtering capacity	0.01
Taffom--------------	25	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.63	Slope	0.63	Too steep for surface application	1.00
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	0.78
						Filtering capacity	0.01
165:							
Rogrube sandy loam----------	50	Somewhat limited		Somewhat limited		Very limited	
		Restricted permeability	0.41	Restricted permeability	0.31	Too steep for surface application	1.00
		Sodium content	0.18	Sodium content	0.18	Restricted permeability	0.31
		Salinity	0.06	Filtering capacity	0.01	Sodium content	0.18
		Filtering capacity	0.01			Too steep for sprinkler application	0.10
						Filtering capacity	0.01
Rogrube clay loam----------	25	Somewhat limited		Somewhat limited		Very limited	
		Restricted permeability	0.41	Restricted permeability	0.31	Too steep for surface application	1.00
		Sodium content	0.18	Sodium content	0.18	Restricted permeability	0.31
		Salinity	0.06			Sodium content	0.18
						Too steep for sprinkler application	0.10

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
166:							
Routt	80	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Slope	0.96	Slope	0.96	Too steep for surface application	1.00
		Too acid	0.11	Too acid	0.42	Too steep for sprinkler application	0.98
						Too acid	0.42
167:							
Routt	30	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Slope	1.00	Slope	1.00	Restricted permeability	1.00
						Too steep for sprinkler application	1.00
Cochetopa	25	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Slope	1.00	Slope	1.00	Restricted permeability	1.00
						Too steep for sprinkler application	1.00
Binco	20	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Cobble content	0.50	Cobble content	0.50	Too steep for sprinkler application	1.00
		Runoff limitation	0.40	Large stones on the surface	0.18	Cobble content	0.50
		Large stones on the surface	0.18			Large stones on the surface	0.18
168:							
Ruedloff	85	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	0.62	Droughty	0.62	Droughty	0.62
						Too steep for surface application	0.32

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
169:							
Ruedloff	60	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Droughty	0.55	Droughty	0.55		
						Too steep for sprinkler application	1.00
						Droughty	0.55
Dunul	30	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	1.00	Droughty	1.00	Droughty	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Leaching limitation	0.45			Too steep for sprinkler application	1.00
170:							
Ryan Park	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.04	Slope	0.04	Too steep for surface application	1.00
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	0.22
						Filtering capacity	0.01
171:							
Ryan Park	85	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	0.01	Droughty	0.01	Droughty	0.01
172:							
Ryan Park	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	1.00
						Filtering capacity	0.01

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
172:							
Coyet	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Leaching limitation	0.45	Droughty	0.10		
		Droughty	0.10	Filtering capacity	0.01	Too steep for sprinkler application	1.00
		Filtering capacity	0.01			Droughty	0.10
						Filtering capacity	0.01
173:							
Ryark	65	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	0.55	Droughty	0.55	Too steep for surface application	1.00
		Slope	0.04	Slope	0.04	Droughty	0.55
						Too steep for sprinkler application	0.22
Powderwash	20	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Droughty	0.08	Droughty	0.08	Too steep for surface application	1.00
		Slope	0.04	Slope	0.04		
		Depth to bedrock	0.01	Depth to bedrock	0.01	Too steep for sprinkler application	0.22
						Droughty	0.08
174:							
Ryark	70	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	0.55	Droughty	0.55	Too steep for surface application	0.92
						Droughty	0.55
						Too steep for sprinkler application	0.02

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
174:							
Maybell	15	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Leaching limitation	0.45	Droughty	0.19	Too steep for surface application	0.92
		Droughty	0.19			Droughty	0.19
						Too steep for sprinkler application	0.02
175:							
Sandwash	40	Very limited		Very limited		Very limited	
		Droughty	1.00	Droughty	1.00	Droughty	1.00
		Depth to bedrock	0.97	Depth to bedrock	0.97	Depth to bedrock	0.97
						Too steep for surface application	0.08
Langspring	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Sodium content	0.02	Sodium content	0.02	Too steep for surface application	0.08
						Sodium content	0.02
Baston	20	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Droughty	0.96	Droughty	0.96	Droughty	0.96
		Depth to bedrock	0.65	Depth to bedrock	0.65	Depth to bedrock	0.65
		Salinity	0.50			Too steep for surface application	0.08
176:							
Schooner	50	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Droughty	1.00	Droughty	1.00
		Depth to bedrock	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Runoff limitation	0.40			Too steep for sprinkler application	1.00
Rock outcrop	35	Not rated		Not rated		Not rated	

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
177:							
Schooner	55	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Droughty	1.00	Droughty	1.00
		Depth to bedrock	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Runoff limitation	0.40			Too steep for sprinkler application	1.00
Tricera	25	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Leaching limitation	0.45	Droughty	0.17	Too steep for surface application	1.00
		Droughty	0.17	Slope	0.16	Too steep for sprinkler application	0.40
		Slope	0.16			Droughty	0.17
178:							
Simanni	50	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	0.04	Droughty	0.04	Too steep for surface application	0.68
						Droughty	0.04
Ruedloff	40	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	0.55	Droughty	0.55	Too steep for surface application	0.68
						Droughty	0.55
179:							
Skyway, dry	85	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Droughty	0.77	Droughty	0.77		
		Depth to bedrock	0.35	Depth to bedrock	0.35		
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	1.00
						Droughty	0.77
						Depth to bedrock	0.35
						Filtering capacity	0.01

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
180:							
Spool	55	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	1.00
						Filtering capacity	0.01
Maybell	30	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Leaching limitation	0.45	Slope	0.16	Too steep for surface application	1.00
		Slope	0.16	Droughty	0.15	Too steep for sprinkler application	0.40
		Droughty	0.15			Droughty	0.15
181:							
Stunner	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for surface application	0.32
		Droughty	0.01	Droughty	0.01	Filtering capacity	0.01
						Droughty	0.01
182:							
Stunner, moist	55	Somewhat limited		Somewhat limited		Somewhat limited	
		Restricted permeability	0.41	Restricted permeability	0.31	Too steep for surface application	0.92
						Restricted permeability	0.31
						Too steep for sprinkler application	0.02
Emlin	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Restricted permeability	0.41	Restricted permeability	0.31	Too steep for surface application	0.92
						Restricted permeability	0.31
						Too steep for sprinkler application	0.02

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
183:							
Styers	45	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Runoff limitation	0.40	Depth to bedrock	0.10		
		Depth to bedrock	0.10	Droughty	0.10	Too steep for sprinkler application	1.00
		Droughty	0.10			Depth to bedrock	0.10
						Droughty	0.10
Ironsprings	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Droughty	0.24	Droughty	0.24		
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	1.00
						Droughty	0.24
						Filtering capacity	0.01
Maysprings	15	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Droughty	0.33	Droughty	0.33		
						Too steep for sprinkler application	1.00
						Droughty	0.33
184:							
Styers	40	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	0.65	Depth to bedrock	0.65		
		Droughty	0.63	Droughty	0.63	Too steep for sprinkler application	1.00
		Runoff limitation	0.40			Depth to bedrock	0.65
						Droughty	0.63

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
184:							
Pinelli	20	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Slope	1.00	Slope	1.00	Restricted permeability	1.00
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	1.00
						Filtering capacity	0.01
Taffom	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	1.00
						Filtering capacity	0.01
185:							
Taffom	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.04	Slope	0.04	Too steep for surface application	1.00
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	0.22
						Filtering capacity	0.01
186:							
Talamantes	85	Not limited		Not limited		Not limited	
187:							
Talamantes	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.37	Slope	0.37	Too steep for surface application	1.00
						Too steep for sprinkler application	0.60
188:							
Talamantes, saline--	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Salinity	0.78	Salinity	0.50	Salinity	0.50
		Restricted permeability	0.41	Restricted permeability	0.31	Restricted permeability	0.31
		Sodium content	0.18	Sodium content	0.18	Sodium content	0.18
						Too steep for surface application	0.08

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
189:							
Tipper	55	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Droughty	1.00	Droughty	1.00
		Droughty	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	0.65	Depth to bedrock	0.65	Too steep for sprinkler application	1.00
						Depth to bedrock	0.65
Crustown	35	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Droughty	1.00	Droughty	1.00
		Depth to bedrock	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
190:							
Tipperary	90	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Slope	0.84	Slope	0.84	Too steep for surface application	1.00
		Leaching limitation	0.45	Droughty	0.30	Too steep for sprinkler application	0.90
		Droughty	0.30			Droughty	0.30
191:							
Tipperary	90	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Leaching limitation	0.45	Droughty	0.25	Too steep for surface application	1.00
		Droughty	0.25			Droughty	0.25
						Too steep for sprinkler application	0.10

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
192:							
Tipperary	50	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Leaching limitation	0.45	Droughty	0.25	Too steep for surface application	0.92
		Droughty	0.25			Droughty	0.25
						Too steep for sprinkler application	0.02
Willwood	40	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	1.00	Droughty	1.00	Droughty	1.00
		Leaching limitation	0.45			Too steep for surface application	0.92
						Too steep for sprinkler application	0.02
193:							
Tisworth	85	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Salinity	0.78	Droughty	0.09	Too steep for surface application	0.32
		Droughty	0.09	Filtering capacity	0.01	Droughty	0.09
		Filtering capacity	0.01			Filtering capacity	0.01
194:							
Tolman	50	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Large stones on the surface	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Large stones on the surface	1.00	Large stones on the surface	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Cobble content	0.32	Cobble content	0.32	Too steep for sprinkler application	1.00

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
194:							
Duffymont	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Large stones on the surface	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Large stones on the surface	1.00	Large stones on the surface	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Cobble content	0.50	Cobble content	0.50		
						Too steep for sprinkler application	1.00
195:							
Torriorthents	95	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Large stones on the surface	1.00	Large stones on the surface	1.00		
		Runoff limitation	0.40	Sodium content	0.32	Too steep for sprinkler application	1.00
						Large stones on the surface	1.00
196:							
Torriorthents	50	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Large stones on the surface	1.00	Large stones on the surface	1.00	Large stones on the surface	1.00
		Runoff limitation	0.40	Sodium content	0.32	Too steep for surface application	1.00
		Sodium content	0.32				
						Sodium content	0.32
Baston	35	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Droughty	0.96	Droughty	0.96	Too steep for surface application	1.00
		Depth to bedrock	0.65	Depth to bedrock	0.65		
		Salinity	0.50			Droughty	0.96
						Depth to bedrock	0.65
197:							
Torriorthents	60	Very limited		Very limited		Very limited	
		Slope	1.00	Droughty	1.00	Droughty	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Slope	1.00	Too steep for surface application	1.00
		Runoff limitation	0.40	Cobble content	0.04		
		Cobble content	0.04	Filtering capacity	0.01	Too steep for sprinkler application	1.00
						Cobble content	0.04

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
197:							
Rock outcrop, sandstone	30	Not rated		Not rated		Not rated	
198:							
Torriorthents	60	Very limited		Very limited		Very limited	
		Slope	1.00	Droughty	1.00	Droughty	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Slope	1.00	Too steep for surface application	1.00
		Restricted permeability	0.75	Salinity	1.00		
		Salinity	0.50	Restricted permeability	0.61	Too steep for sprinkler application	1.00
						Salinity	1.00
Rock outcrop, shale	40	Not rated		Not rated		Not rated	
199:							
Torriorthents	60	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Runoff limitation	0.40			Too steep for sprinkler application	1.00
Torripsamments	30	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Droughty	1.00	Droughty	1.00
		Droughty	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	0.80	Depth to bedrock	0.80	Too steep for sprinkler application	1.00
						Depth to bedrock	0.80
200:							
Tresano	80	Somewhat limited		Somewhat limited		Very limited	
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for surface application	1.00
						Too steep for sprinkler application	0.10
						Filtering capacity	0.01

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
201:							
Tresano	35	Not limited		Not limited		Somewhat limited	
						Too steep for surface application	0.92
						Too steep for sprinkler application	0.02
Hiatha	30	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Droughty	1.00	Droughty	1.00
		Depth to bedrock	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	0.84	Slope	0.84	Too steep for surface application	1.00
		Runoff limitation	0.40	Sodium content	0.08		
						Too steep for sprinkler application	0.90
Kandaly	15	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	0.90	Droughty	0.90	Too steep for surface application	0.92
		Leaching limitation	0.45	Sodium content	0.08		
		Sodium content	0.08			Droughty	0.90
						Sodium content	0.08
						Too steep for sprinkler application	0.02
202:							
Turzo	90	Not limited		Not limited		Not limited	
203:							
Turzo, saline	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Sodium content	0.98	Sodium content	0.98	Sodium content	0.98
		Salinity	0.78			Too steep for surface application	0.32
204:							
Typic Natrargids	80	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Salinity	0.50				
		Runoff limitation	0.40				

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
205:							
Uffens	90	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Salinity	0.06	Droughty	0.01	Droughty	0.01
		Droughty	0.01				
206:							
Ustorthents, frigid	55	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Droughty	1.00	Droughty	1.00		
		Large stones on the surface	1.00	Large stones on the surface	1.00	Too steep for sprinkler application	1.00
		Depth to bedrock	0.65	Depth to bedrock	0.65		
		Runoff limitation	0.40			Droughty	1.00
						Large stones on the surface	1.00
						Depth to bedrock	0.65
Borolls	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Restricted permeability	1.00	Restricted permeability	1.00		
		Droughty	0.48	Droughty	0.48	Too steep for sprinkler application	1.00
		Depth to bedrock		Depth to bedrock	0.10		
						Restricted permeability	1.00
						Droughty	0.48
						Depth to bedrock	0.10
207:							
Vermillion	40	Somewhat limited		Somewhat limited		Very limited	
		Droughty	0.97	Droughty	0.97	Too steep for surface application	1.00
		Slope	0.96	Slope	0.96		
		Depth to bedrock	0.65	Depth to bedrock	0.65	Too steep for sprinkler application	0.98
						Droughty	0.97
						Depth to bedrock	0.65
Langspring	35	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Too steep for surface application	1.00
		Sodium content	0.02	Sodium content	0.02		
						Too steep for sprinkler application	0.98
						Sodium content	0.02

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
208:							
Wallson	50	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.04	Slope	0.04	Too steep for surface application	1.00
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	0.22
						Filtering capacity	0.01
Tricera	35	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Leaching limitation	0.45	Droughty	0.12	Too steep for surface application	1.00
		Droughty	0.12	Slope	0.04	Too steep for sprinkler application	0.22
		Slope	0.04			Droughty	0.12
209:							
Weed	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for surface application	0.92
						Too steep for sprinkler application	0.02
						Filtering capacity	0.01
210:							
Willwood	55	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Droughty	1.00	Droughty	1.00
		Droughty	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Leaching limitation	0.45			Too steep for surface application	0.92
						Too steep for sprinkler application	0.02
Sheppard, cool	35	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Leaching limitation	0.45	Droughty	0.05	Too steep for surface application	0.92
		Droughty	0.05			Droughty	0.05
						Too steep for sprinkler application	0.02

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
211:							
Willwood	55	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Droughty	1.00	Droughty	1.00
		Droughty	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Cobble content	1.00	Cobble content	1.00		
		Leaching limitation	0.45			Too steep for sprinkler application	1.00
						Cobble content	1.00
Tipperary	35	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Leaching limitation	0.45	Droughty	0.25		
		Droughty	0.25			Too steep for sprinkler application	1.00
						Droughty	0.25
212:							
Willwood	60	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Droughty	1.00	Droughty	1.00
		Droughty	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Leaching limitation	0.45			Too steep for surface application	0.92
						Too steep for sprinkler application	0.02
Tipperary, cobbly substratum	25	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	0.48	Droughty	0.48	Too steep for surface application	0.92
		Leaching limitation	0.45			Droughty	0.48
						Too steep for sprinkler application	0.02
213:							
Winevada	60	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Too steep for surface application	1.00
		Depth to bedrock	0.84	Depth to bedrock	0.84		
		Droughty	0.43	Droughty	0.43	Too steep for sprinkler application	0.98
		Depth to bedrock	0.84	Depth to bedrock	0.84		
						Depth to bedrock	0.84
						Droughty	0.43

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
213:							
Splitro	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	0.96	Slope	0.96	Too steep for surface application	1.00
		Too acid	0.11	Too acid	0.42		
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	0.98
						Too acid	0.42
214:							
Winevada	60	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	0.80	Depth to bedrock	0.80		
		Droughty	0.48	Droughty	0.48	Too steep for sprinkler application	1.00
		Too acid	0.11	Too acid	0.42		
						Depth to bedrock	0.80
						Droughty	0.48
						Too acid	0.42
Splitro	30	Very limited		Very limited		Very limited	
		Slope	1.00	Droughty	1.00	Droughty	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Slope	1.00	Too steep for surface application	1.00
		Too acid	0.11	Too acid	0.42		
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	1.00
						Too acid	0.42
215:							
Winkleman	85	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Depth to saturated zone	0.24	Flooding	0.40	Depth to saturated zone	0.24
				Depth to saturated zone	0.24		
216:							
Yamo	90	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.04	Slope	0.04	Too steep for surface application	1.00
						Too steep for sprinkler application	0.22

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
217:							
Yamo	90	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
218:							
Yellowwash	50	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Runoff limitation	0.40	Salinity	1.00	Too steep for surface application	1.00
		Salinity	0.35	Slope	0.16		
		Slope	0.16			Salinity	1.00
						Too steep for sprinkler application	0.40
Piezon	35	Somewhat limited		Somewhat limited		Very limited	
		Depth to bedrock	0.46	Depth to bedrock	0.46	Too steep for surface application	1.00
		Slope	0.16	Slope	0.16		
		Droughty	0.07	Droughty	0.07	Depth to bedrock	0.46
						Too steep for sprinkler application	0.40
						Droughty	0.07
219:							
Youga	90	Somewhat limited		Somewhat limited		Very limited	
		Restricted permeability	0.41	Restricted permeability	0.31	Too steep for surface application	1.00
		Slope	0.04	Slope	0.04		
						Restricted permeability	0.31
						Too steep for sprinkler application	0.22
220:							
Youga	50	Somewhat limited		Somewhat limited		Very limited	
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for surface application	1.00
						Too steep for sprinkler application	0.10
						Filtering capacity	0.01

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
220:							
Dinnen	40	Somewhat limited		Somewhat limited		Very limited	
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for surface application	1.00
						Too steep for sprinkler application	0.10
						Filtering capacity	0.01
221:							
Youga	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Large stones on the surface	1.00	Large stones on the surface	1.00		
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	1.00
						Large stones on the surface	1.00
						Filtering capacity	0.01
Gelkie	30	Very limited		Very limited		Very limited	
		Slope	1.00	Large stones on the surface	1.00	Large stones on the surface	1.00
		Large stones on the surface	1.00	Slope	1.00	Too steep for surface application	1.00
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	1.00
						Filtering capacity	0.01
Clayburn, warm	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Too acid	0.11	Too acid	0.42		
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	1.00
						Too acid	0.42
						Filtering capacity	0.01
222:							
Youngston, cool	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Sodium content	0.32	Flooding	0.40	Sodium content	0.32
		Salinity	0.01	Sodium content	0.32		

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
223:							
Youngston, well drained	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Restricted permeability	0.41	Flooding	0.40	Restricted permeability	0.31
		Sodium content	0.18	Restricted permeability	0.31	Sodium content	0.18
		Salinity	0.01	Sodium content	0.18		
224:							
Zillion	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Droughty	0.02	Droughty	0.02		
						Too steep for sprinkler application	1.00
Barkelew, moist	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Cobble content	0.75	Cobble content	0.75		
		Restricted permeability	0.41	Restricted permeability	0.31	Too steep for sprinkler application	1.00
		Droughty	0.04	Droughty	0.04		
						Cobble content	0.75
						Restricted permeability	0.31
						Droughty	0.04
Grapit	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
225:							
Abracon	45	Somewhat limited		Somewhat limited		Somewhat limited	
		Sodium content	0.50	Sodium content	0.50	Too steep for surface application	0.68
						Sodium content	0.50
Solirec	40	Not limited		Not limited		Somewhat limited	
						Too steep for surface application	0.68

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
226:							
Arches	45	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Droughty	1.00	Droughty	1.00
		Depth to bedrock	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Runoff limitation	0.40			Too steep for sprinkler application	1.00
Mespun	20	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Leaching limitation	0.45	Droughty	0.29	Too steep for sprinkler application	1.00
		Droughty	0.29			Droughty	0.29
Rock outcrop	20	Not rated		Not rated		Not rated	
227:							
Bankard family	55	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Leaching limitation	0.45	Flooding	0.40	Droughty	0.30
		Droughty	0.30	Droughty	0.30		
Cameo	35	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
				Flooding	0.40		
228:							
Bondman	50	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Runoff limitation	0.40			Too steep for sprinkler application	1.00
Rock outcrop	35	Not rated		Not rated		Not rated	
229:							
Cameo	85	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
				Flooding	0.40		

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
230:							
Cragnot	35	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Large stones on the surface	0.92	Large stones on the surface	0.92		
		Droughty	0.65	Droughty	0.65	Too steep for sprinkler application	1.00
						Large stones on the surface	0.92
						Droughty	0.65
Pensore	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Runoff limitation	0.40			Too steep for sprinkler application	1.00
Grapit	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Droughty	0.84	Droughty	0.84	Too steep for sprinkler application	1.00
						Droughty	0.84
231:							
Green River	70	Somewhat limited		Somewhat limited		Somewhat limited	
		Sodium content	0.82	Sodium content	0.82	Sodium content	0.82
		Depth to saturated zone	0.43	Depth to saturated zone	0.43	Depth to saturated zone	0.43
		Salinity	0.06	Flooding	0.40	Droughty	0.03
		Droughty	0.03	Droughty	0.03	Filtering capacity	0.01
		Filtering capacity	0.01	Filtering capacity	0.01		
Fluvaquents	15	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
232:							
Lakebench	50	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
Strell	35	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Droughty	1.00	Droughty	1.00
		Depth to bedrock	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Runoff limitation	0.40			Too steep for sprinkler application	1.00
233:							
Lakebench	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	1.00
						Filtering capacity	0.01
Yampa	35	Very limited		Very limited		Very limited	
		Cobble content	1.00	Cobble content	1.00	Too steep for surface application	1.00
		Slope	1.00	Slope	1.00	Cobble content	1.00
		Droughty	0.96	Droughty	0.96	Too steep for sprinkler application	1.00
		Large stones on the surface	0.92	Large stones on the surface	0.92	Droughty	0.96
		Filtering capacity	0.01	Filtering capacity	0.01	Large stones on the surface	0.92
234:							
Mantlemine	85	Not limited		Not limited		Somewhat limited	
						Too steep for surface application	0.32

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
235:							
Mantlemine----------	55	Not limited		Not limited		Somewhat limited	
						Too steep for surface application	0.92
						Too steep for sprinkler application	0.02
Emlin----------	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Restricted permeability	0.41	Restricted permeability	0.31	Too steep for surface application	0.92
						Restricted permeability	0.31
						Too steep for sprinkler application	0.02
236:							
Mido----------	85	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Leaching limitation	0.45			Too steep for surface application	1.00
						Too steep for sprinkler application	0.10
237:							
Mikim loam----------	55	Not limited		Not limited		Not limited	
Mikim silt loam-----	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Sodium content	0.68	Sodium content	0.68	Sodium content	0.68
		Salinity	0.06	Salinity	0.50	Salinity	0.50
238:							
Milok----------	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for surface application	0.68
						Filtering capacity	0.01
239:							
Milok----------	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Filtering capacity	0.01	Filtering capacity	0.01		
						Too steep for sprinkler application	1.00
						Filtering capacity	0.01

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
239:							
Solirec	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
Strych	15	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Cobble content	0.87	Cobble content	0.87		
		Droughty	0.12	Droughty	0.12	Too steep for sprinkler application	1.00
						Cobble content	0.87
						Droughty	0.12
240:							
Milok	70	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Filtering capacity	0.01	Filtering capacity	0.01		
						Too steep for sprinkler application	1.00
						Filtering capacity	0.01
Strych	20	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Slope	0.96	Slope	0.96	Too steep for surface application	1.00
		Droughty	0.92	Droughty	0.92		
		Cobble content	0.87	Cobble content	0.87	Too steep for sprinkler application	0.98
						Droughty	0.92
						Cobble content	0.87
241:							
Pensore	60	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Runoff limitation	0.40				
						Too steep for sprinkler application	1.00

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
241:							
Roto	25	Very limited		Very limited		Very limited	
		Droughty	1.00	Droughty	1.00	Droughty	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Depth to bedrock	0.97	Depth to bedrock	0.97		
		Large stones on the surface	0.92	Large stones on the surface	0.92	Too steep for sprinkler application	1.00
						Depth to bedrock	0.97
						Large stones on the surface	0.92
242:							
Riverwash	85	Not rated		Not rated		Not rated	
243:							
Rizno	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	0.96	Slope	0.96	Too steep for surface application	1.00
		Cobble content	0.87	Cobble content	0.87		
		Runoff limitation	0.40	Filtering capacity	0.01	Too steep for sprinkler application	0.98
						Cobble content	0.87
Windcomb	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	0.96	Slope	0.96	Too steep for surface application	1.00
		Restricted permeability	0.41	Restricted permeability	0.31		
		Runoff limitation	0.40			Too steep for sprinkler application	0.98
						Restricted permeability	0.31
Anasazi	15	Very limited		Very limited		Very limited	
		Droughty	1.00	Droughty	1.00	Droughty	1.00
		Slope	0.96	Slope	0.96	Too steep for surface application	1.00
		Depth to bedrock	0.90	Depth to bedrock	0.90		
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	0.98
						Depth to bedrock	0.90
						Filtering capacity	0.01
244:							
Rock outcrop	60	Not rated		Not rated		Not rated	

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
244:							
Hackling	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Runoff limitation	0.40	Large stones on the surface	0.18		
		Large stones on the surface	0.18	Filtering capacity	0.01	Too steep for sprinkler application	1.00
						Large stones on the surface	0.18
245:							
Rock outcrop	30	Not rated		Not rated		Not rated	
Torriorthents	30	Very limited		Very limited		Very limited	
		Slope	1.00	Droughty	1.00	Droughty	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Slope	1.00	Too steep for surface application	1.00
		Large stones on the surface	0.92	Large stones on the surface	0.92		
		Runoff limitation	0.40			Too steep for sprinkler application	1.00
						Large stones on the surface	0.92
Ustorthents	30	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Cobble content	0.87	Cobble content	0.87		
		Droughty	0.76	Droughty	0.76	Too steep for sprinkler application	1.00
		Depth to bedrock	0.20	Depth to bedrock	0.20		
						Cobble content	0.87
						Droughty	0.76
						Depth to bedrock	0.20
246:							
Schoonover	55	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	0.96	Slope	0.96	Too steep for surface application	1.00
						Too steep for sprinkler application	0.98

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
246:							
Duffymont	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Cobble content	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Cobble content	1.00	Cobble content	1.00
		Slope	0.96	Slope	0.96	Too steep for surface application	1.00
		Runoff limitation	0.40	Filtering capacity	0.01		
						Too steep for sprinkler application	0.98
247:							
Stout	60	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Runoff limitation	0.40	Filtering capacity	0.01		
		Filtering capacity	0.01			Too steep for sprinkler application	1.00
						Filtering capacity	0.01
Rock outcrop	30	Not rated		Not rated		Not rated	
248:							
Strych	50	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Cobble content	0.87	Cobble content	0.87		
		Droughty	0.12	Droughty	0.12	Too steep for sprinkler application	1.00
						Cobble content	0.87
						Droughty	0.12
Mellenthin	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Large stones on the surface	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Large stones on the surface	1.00	Large stones on the surface	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Too stony	0.53	Cobble content	0.50		
						Too steep for sprinkler application	1.00

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
249:							
Zillion	40	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Droughty	0.21	Droughty	0.21	Too steep for sprinkler application	1.00
						Droughty	0.21
Yampa	25	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Cobble content	1.00	Cobble content	1.00	Too steep for sprinkler application	1.00
		Droughty	0.96	Droughty	0.96	Cobble content	1.00
		Large stones on the surface	0.92	Large stones on the surface	0.92	Droughty	0.96
		Filtering capacity	0.01	Filtering capacity	0.01	Large stones on the surface	0.92
Clyl	20	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Droughty	0.08	Droughty	0.08	Too steep for sprinkler application	1.00
						Droughty	0.08
250:							
Abracon	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Sodium content	0.50	Sodium content	0.50	Too steep for surface application	0.68
						Sodium content	0.50
251:							
Badland	60	Not rated		Not rated		Not rated	
Renegade	25	Very limited		Very limited		Very limited	
		Slope	1.00	Large stones on the surface	1.00	Large stones on the surface	1.00
		Large stones on the surface	1.00	Slope	1.00	Too steep for surface application	1.00
		Cobble content	0.87	Cobble content	0.87	Too steep for sprinkler application	1.00
		Droughty	0.44	Droughty	0.44	Cobble content	0.87
		Filtering capacity	0.01	Filtering capacity	0.01	Droughty	0.44

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
252:							
Bigtom	50	Very limited		Very limited		Very limited	
		Slope	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Filtering capacity	1.00	Slope	1.00	Too steep for surface application	1.00
		Droughty	0.98	Droughty	0.98	Too steep for sprinkler application	1.00
		Restricted permeability	0.41	Too acid	0.42	Droughty	0.98
		Too acid	0.11	Restricted permeability	0.31	Too acid	0.42
Namlot	20	Very limited		Very limited		Very limited	
		Slope	1.00	Droughty	1.00	Droughty	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Cobble content	1.00	Cobble content	1.00	Cobble content	1.00
		Droughty	1.00	Slope	1.00	Too steep for surface application	1.00
		Runoff limitation	0.40	Large stones on the surface	0.18	Too steep for sprinkler application	1.00
Dokie	15	Very limited		Very limited		Very limited	
		Slope	1.00	Droughty	1.00	Droughty	1.00
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	1.00	Slope	1.00	Too steep for surface application	1.00
		Too acid	0.11	Too acid	0.42	Too steep for sprinkler application	1.00
						Too acid	0.42
253:							
Clapper	85	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Too steep for surface application	1.00
		Droughty	0.20	Droughty	0.20	Too steep for sprinkler application	0.98
		Sodium content	0.08	Sodium content	0.08	Droughty	0.20
						Sodium content	0.08
254:							
Cliff	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Sodium content	0.68	Sodium content	0.68	Sodium content	0.68
		Filtering capacity	0.01	Filtering capacity	0.01	Filtering capacity	0.01

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
255:							
Clyl	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Droughty	0.56	Droughty	0.56		
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	1.00
						Droughty	0.56
						Filtering capacity	0.01
Pinerid	40	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Large stones on the surface	0.92	Large stones on the surface	0.92		
		Runoff limitation	0.40			Too steep for sprinkler application	1.00
						Large stones on the surface	0.92
256:							
Cortyzack	65	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Too steep for surface application	1.00
						Too steep for sprinkler application	0.98
Diagulch	20	Very limited		Very limited		Very limited	
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Slope	0.04	Slope	0.04	Too steep for surface application	1.00
						Too steep for sprinkler application	0.22
257:							
Cortyzack	55	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Too steep for surface application	1.00
						Too steep for sprinkler application	0.98

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
257:							
Duffymont	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Cobble content	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Cobble content	1.00	Cobble content	1.00
		Slope	0.96	Slope	0.96	Too steep for surface application	1.00
		Runoff limitation	0.40	Filtering capacity	0.01		
						Too steep for sprinkler application	0.98
258:							
Cortyzack	45	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.96	Slope	0.96	Too steep for surface application	1.00
						Too steep for sprinkler application	0.98
Flynncove	45	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Droughty	0.83	Droughty	0.83		
		Cobble content	0.12	Cobble content	0.12	Too steep for sprinkler application	1.00
						Droughty	0.83
						Cobble content	0.12
259:							
Denco	45	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Runoff limitation	0.40	Depth to bedrock	0.03		
		Depth to bedrock	0.03			Too steep for sprinkler application	1.00
						Depth to bedrock	0.03
Gerst	40	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Runoff limitation	0.40				
						Too steep for sprinkler application	1.00

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
260:							
Dokie	70	Very limited		Very limited		Very limited	
		Slope	1.00	Droughty	1.00	Droughty	1.00
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	1.00	Slope	1.00	Too steep for surface application	1.00
		Too acid	0.11	Too acid	0.42	Too steep for sprinkler application	1.00
						Too acid	0.42
Flynncove	15	Very limited		Very limited		Very limited	
		Slope	1.00	Droughty	1.00	Droughty	1.00
		Large stones on the surface	1.00	Large stones on the surface	1.00	Large stones on the surface	1.00
		Droughty	1.00	Slope	1.00	Too steep for surface application	1.00
		Cobble content	1.00	Cobble content	1.00	Too steep for sprinkler application	1.00
						Cobble content	1.00
261:							
Dokie	50	Very limited		Very limited		Very limited	
		Slope	1.00	Droughty	1.00	Droughty	1.00
		Filtering capacity	1.00	Filtering capacity	1.00	Filtering capacity	1.00
		Droughty	1.00	Slope	1.00	Too steep for surface application	1.00
		Too acid	0.11	Too acid	0.42	Too steep for sprinkler application	1.00
						Too acid	0.42
Namlot	40	Very limited		Very limited		Very limited	
		Slope	1.00	Droughty	1.00	Droughty	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Cobble content	1.00	Cobble content	1.00	Cobble content	1.00
		Droughty	1.00	Slope	1.00	Too steep for surface application	1.00
		Runoff limitation	0.40	Large stones on the surface	0.18	Too steep for sprinkler application	1.00

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
262:							
Gompers	85	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Sodium content	0.50	Sodium content	0.50		
		Runoff limitation	0.40	Filtering capacity	0.01	Too steep for sprinkler application	1.00
						Sodium content	0.50
263:							
Hanksville	85	Very limited		Very limited		Very limited	
		Restricted permeability	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Slope	0.96	Slope	0.96	Too steep for surface application	1.00
		Sodium content	0.50	Sodium content	0.50		
		Salinity	0.35	Droughty	0.32	Too steep for sprinkler application	0.98
		Droughty	0.32	Depth to bedrock	0.20		
						Sodium content	0.50
						Droughty	0.32
264:							
Mikim	85	Somewhat limited		Somewhat limited		Very limited	
		Sodium content	0.08	Sodium content	0.08	Too steep for surface application	1.00
		Slope	0.04	Slope	0.04		
						Too steep for sprinkler application	0.22
						Sodium content	0.08
265:							
Mikim	85	Very limited		Very limited		Very limited	
		Sodium content	1.00	Sodium content	1.00	Sodium content	1.00
		Salinity	0.06	Salinity	0.50	Salinity	0.50
266:							
Rock outcrop	40	Not rated		Not rated		Not rated	
Boxring	25	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Large stones on the surface	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Large stones on the surface	1.00	Large stones on the surface	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Cobble content	1.00	Cobble content	1.00		
						Too steep for sprinkler application	1.00

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
266:							
Tridell	25	Very limited		Very limited		Very limited	
		Slope	1.00	Cobble content	1.00	Cobble content	1.00
		Cobble content	1.00	Slope	1.00	Too steep for surface application	1.00
		Droughty	0.70	Droughty	0.70		
		Large stones on the surface	0.18	Large stones on the surface	0.18	Too steep for sprinkler application	1.00
						Droughty	0.70
						Large stones on the surface	0.18
267:							
Solirec	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for surface application	0.68
						Filtering capacity	0.01
Abracon	30	Somewhat limited		Somewhat limited		Somewhat limited	
		Sodium content	0.50	Sodium content	0.50	Too steep for surface application	0.68
						Sodium content	0.50
Begay	20	Somewhat limited		Somewhat limited		Very limited	
		Sodium content	0.18	Sodium content	0.18	Too steep for surface application	1.00
		Slope	0.04	Slope	0.04		
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for sprinkler application	0.22
						Sodium content	0.18
						Filtering capacity	0.01
268:							
Toliver	55	Very limited		Very limited		Very limited	
		Slope	1.00	Large stones on the surface	1.00	Large stones on the surface	1.00
		Large stones on the surface	1.00	Slope	1.00	Too steep for surface application	1.00
		Cobble content	1.00	Cobble content	1.00		
		Droughty	0.28	Droughty	0.28	Too steep for sprinkler application	1.00
		Filtering capacity	0.01	Filtering capacity	0.01	Cobble content	1.00
						Droughty	0.28
Rock outcrop	30	Not rated		Not rated		Not rated	

Table 18.--Agricultural waste management: Manure and food processing waste, Sewage sludge, and Wastewater--Continued

Map symbol and soil name	Pct. of map unit	Application of manure and food-processing waste		Application of sewage sludge		Disposal of wastewater by irrigation	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
269:							
Walknolls	60	Very limited		Very limited		Very limited	
		Slope	1.00	Droughty	1.00	Droughty	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Droughty	1.00	Slope	1.00	Too steep for surface application	1.00
		Sodium content	0.50	Sodium content	0.50		
		Runoff limitation	0.40	Cobble content	0.04	Too steep for sprinkler application	1.00
						Sodium content	0.50
Badland	15	Not rated		Not rated		Not rated	
Rock outcrop	10	Not rated		Not rated		Not rated	
270:							
Walknolls	55	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Droughty	1.00	Droughty	1.00
		Droughty	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Too steep for surface application	1.00
		Sodium content	0.50	Sodium content	0.50		
		Runoff limitation	0.40	Filtering capacity	0.01	Too steep for sprinkler application	1.00
						Sodium content	0.50
Gilston	35	Somewhat limited		Somewhat limited		Somewhat limited	
		Sodium content	0.68	Sodium content	0.68	Sodium content	0.68
		Filtering capacity	0.01	Filtering capacity	0.01	Too steep for surface application	0.32
						Filtering capacity	0.01
271:							
Water	95	Not rated		Not rated		Not rated	

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of Wastewater

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1:							
Abor	85	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
				Depth to bedrock	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	1.00
2:							
Abor	80	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
				Depth to bedrock	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	1.00
3:							
Adderton	90	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	0.68
		Flooding	0.40	Slope	0.50		
4:							
Almy	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.50	Slope	1.00	Too steep for sprinkler application	0.50
						Restricted permeability	0.21
5:							
Apmay	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to saturated zone	1.00	Filtering capacity	1.00
		Depth to saturated zone	0.95	Restricted permeability	1.00	Depth to saturated zone	0.95
		Flooding	0.40				

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
6:							
Avalon	45	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	0.92
		Too steep for surface application	0.06	Slope	0.88	Restricted permeability	0.21
						Too steep for sprinkler application	0.06
						Filtering capacity	0.01
Mack	45	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	0.92
		Too steep for surface application	0.06	Slope	0.88	Restricted permeability	0.21
						Too steep for sprinkler application	0.06
7:							
Avalon	30	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Depth to bedrock	0.93
		Depth to bedrock	0.93	Depth to bedrock	1.00	Too steep for surface application	0.92
		Too steep for surface application	0.06	Slope	0.88	Restricted permeability	0.21
						Too steep for sprinkler application	0.06
Persayo, moist	25	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
Degater	20	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
				Depth to bedrock	1.00	Restricted permeability	1.00
						Too steep for sprinkler application	1.00
8:							
Badland	90	Not rated		Not rated		Not rated	

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
9:							
Baroid	55	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Filtering capacity	1.00
		Flooding	0.40			Sodium content	0.32
		Sodium content	0.32			Salinity	0.13
Eghelm	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to saturated zone	1.00	Sodium content	1.00
		Sodium content	1.00	Restricted permeability	0.31	Filtering capacity	0.01
		Flooding	0.40				
10:							
Battlement	85	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Filtering capacity	0.01
		Flooding	0.40				
11:							
Battlement, saline	80	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Restricted permeability	0.21
		Flooding	0.40	Depth to saturated zone	1.00	Sodium content	0.02
		Sodium content	0.02				
12:							
Berlake	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Filtering capacity	1.00
		Too steep for surface application	0.22	Slope	1.00	Too steep for surface application	1.00
						Too steep for sprinkler application	0.22
13:							
Berlake	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
14:							
Berlake	55	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Filtering capacity	1.00
		Too steep for surface application	0.22	Slope	1.00	Too steep for surface application	1.00
						Too steep for sprinkler application	0.22

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
14:							
Maysprings	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Filtering capacity	1.00
		Too steep for surface application	0.22	Slope	1.00	Too steep for surface application	1.00
						Too steep for sprinkler application	0.22
15:							
Berlake	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
						Filtering capacity	0.01
Taffom	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
		application				Filtering capacity	0.01
Gretdivid	15	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
16:							
Bilhil	85	Not limited		Very limited		Very limited	
				Restricted permeability	1.00	Restricted permeability	1.00
				Depth to saturated zone	1.00		

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
17:							
Binco	90	Very limited		Very limited		Very limited	
		Too steep for surface application	1.00	Slope	1.00	Too steep for surface application	1.00
				Restricted permeability	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	1.00
						Cobble content	0.50
						Large stones on the surface	0.18
18:							
Boltus	50	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Restricted permeability	1.00	Depth to bedrock	1.00
		Too steep for surface application	0.06	Depth to bedrock	1.00	Restricted permeability	0.96
		Sodium content	0.02	Slope	0.88	Too steep for surface application	0.92
						Too steep for sprinkler application	0.06
						Sodium content	0.02
Beamton	25	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Restricted permeability	1.00	Depth to bedrock	1.00
		Seepage	0.69	Depth to bedrock	1.00	Restricted permeability	0.96
		Too steep for surface application	0.06	Slope	0.88	Too steep for surface application	0.92
		Sodium content	0.02			Too steep for sprinkler application	0.06
						Sodium content	0.02
19:							
Borollic Natrargids	40	Very limited		Very limited		Very limited	
		Sodium content	1.00	Restricted permeability	1.00	Sodium content	1.00
		Seepage	1.00			Restricted permeability	1.00
						Filtering capacity	0.01
Borollic Haplargids	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Slope	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	0.21

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
19:							
Ustic Torrifluvents------	25	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Depth to saturated zone	1.00	Filtering capacity	0.01
		Flooding	0.40	Restricted permeability	1.00		
20:							
Brownsto----------	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Slope	1.00		
		Cobble content	0.04	Cobble content	0.20	Too steep for sprinkler application	1.00
Castee----------	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Slope	1.00		
						Too steep for sprinkler application	1.00
						Filtering capacity	0.01
21:							
Bulkley----------	80	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00		
						Too steep for sprinkler application	1.00
						Restricted permeability	0.96
						Large stones on the surface	0.92
22:							
Bulkley----------	80	Somewhat limited		Very limited		Very limited	
		Too steep for surface application	0.22	Restricted permeability	1.00	Restricted permeability	1.00
				Slope	1.00	Too steep for surface application	1.00
						Too steep for sprinkler application	0.22

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
23:							
Bulkley	90	Very limited		Very limited		Very limited	
		Too steep for surface application	1.00	Slope	1.00	Too steep for surface application	1.00
				Restricted permeability	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	1.00
24:							
Bulkley	60	Very limited		Very limited		Very limited	
		Too steep for surface application	1.00	Slope	1.00	Too steep for surface application	1.00
				Restricted permeability	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	1.00
						Cobble content	0.50
Quilt	25	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
		Cobble content	0.01	Cobble content	0.01	Restricted permeability	0.96
25:							
Campspass	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.22	Slope	1.00	Restricted permeability	0.96
						Too steep for sprinkler application	0.22
26:							
Campspass	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	0.96

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
27:							
Canlodore	95	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00	Stone content	0.90	Too steep for surface application	1.00
		Stone content	0.88	Cobble content	0.45	Too steep for sprinkler application	1.00
		Cobble content	0.43			Too acid	0.42
		Too acid	0.42				
28:							
Carbol	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	0.68
				Slope	0.50		
Irigul	25	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Slope	1.00	Too steep for sprinkler application	1.00
		Stone content	0.01	Stone content	0.07		
Rock outcrop	25	Not rated		Not rated		Not rated	
29:							
Carbol	45	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.22	Slope	1.00	Too steep for sprinkler application	0.22
Miracle	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.22	Slope	1.00	Too steep for sprinkler application	0.22
						Filtering capacity	0.01

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
30:							
Carmody	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.94	Restricted permeability	0.31	Too steep for sprinkler application	0.94
						Filtering capacity	0.01
Rock River	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.94	Slope	1.00	Too steep for sprinkler application	0.94
						Filtering capacity	0.01
Crestman	20	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Filtering capacity	1.00
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Too steep for surface application	0.94			Too steep for surface application	1.00
						Too steep for sprinkler application	0.94
31:							
Castee	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.22	Slope	1.00	Too steep for sprinkler application	0.22
						Filtering capacity	0.01
32:							
Chroder	80	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.22	Restricted permeability	0.31	Too steep for sprinkler application	0.22
						Filtering capacity	0.01

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
33:							
Clayburn, warm------	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Slope	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	0.21
34:							
Clayburn----------	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
						Filtering capacity	0.01
Foidel----------	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
						Filtering capacity	0.01
35:							
Clayburn----------	45	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	0.21
Youga, moist--------	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too acid	0.42			Too steep for sprinkler application	1.00
						Too acid	0.42
						Restricted permeability	0.21

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
36:							
Clifsand	60	Very limited		Very limited		Very limited	
		Seepage	1.00	Stone content	1.00	Filtering capacity	1.00
		Cobble content	0.44	Slope	1.00		
		Stone content	0.44	Cobble content	0.60	Too steep for surface application	1.00
		Too steep for surface application	0.22	Restricted permeability	0.31		
						Too steep for sprinkler application	0.22
Chroder	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.22	Restricted permeability	0.31		
						Too steep for sprinkler application	0.22
						Filtering capacity	0.01
37:							
Cochetopa	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00		
						Too steep for sprinkler application	1.00
						Restricted permeability	0.96
38:							
Cochetopa	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00		
						Too steep for sprinkler application	1.00
						Restricted permeability	0.96
39:							
Cochetopa, warm	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.22	Slope	1.00		
						Restricted permeability	0.96
						Too steep for sprinkler application	0.22

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
40:							
Cochetopa	45	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	0.96
Gothic	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Large stones on the surface	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Stone content	0.99	Stone content	0.59	Too steep for sprinkler application	1.00
						Restricted permeability	0.96
41:							
Cochetopa	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
		Stone content	1.00	Stone content	0.78	Large stones on the surface	1.00
						Restricted permeability	0.96
Gothic	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
		Stone content	0.03	Stone content	0.01	Restricted permeability	0.96
						Large stones on the surface	0.92
42:							
Cochetopa	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.50	Slope	1.00	Restricted permeability	0.96
						Too steep for sprinkler application	0.50

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
42:							
Jerry	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Large stones on the surface	1.00
		Too steep for surface application	0.50	Slope	1.00	Too steep for surface application	1.00
		Stone content	0.21	Stone content	0.09	Restricted permeability	0.96
						Too steep for sprinkler application	0.50
						Cobble content	0.04
43:							
Coldspring, moist	80	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
		Depth to bedrock	0.71	Restricted permeability	1.00	Depth to bedrock	0.71
		Too steep for surface application	0.22	Slope	1.00	Too steep for sprinkler application	0.22
44:							
Cowestglen	80	Very limited		Somewhat limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	0.31	Sodium content	0.08
		Flooding	0.40			Filtering capacity	0.01
		Sodium content	0.08				
45:							
Coyet	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.22	Restricted permeability	0.31	Too steep for sprinkler application	0.22
						Filtering capacity	0.01
46:							
Coyet	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	0.31	Too steep for sprinkler application	1.00
						Filtering capacity	0.01

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
47:							
Coyet	45	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Depth to bedrock	1.00		
				Restricted permeability	0.31	Too steep for sprinkler application	1.00
		Depth to bedrock	0.61				
						Depth to bedrock	0.61
						Filtering capacity	0.01
Crestman, moist	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00		
		Too steep for surface application	1.00	Restricted permeability	0.31	Depth to bedrock	1.00
						Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
48:							
Crago	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00		
				Cobble content	0.17	Too steep for sprinkler application	1.00
		Cobble content	0.14				
						Cobble content	0.50
Pensore	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Slope	1.00		
						Too steep for sprinkler application	1.00
Grapit	15	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00		
				Stone content	0.43	Too steep for sprinkler application	1.00
		Stone content	0.39	Cobble content	0.03		
		Cobble content	0.03			Restricted permeability	0.21

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
49:							
Cryoborolls, slumped	85	Very limited		Very limited		Very limited	
		Too steep for surface application	1.00	Slope	1.00	Too steep for surface application	1.00
		Seepage	0.69	Restricted permeability	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	0.96
50:							
Cushool	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.22	Slope	1.00	Too steep for sprinkler application	0.22
						Filtering capacity	0.01
51:							
Cushool	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
						Filtering capacity	0.01
52:							
Danavore	45	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Restricted permeability	1.00	Cobble content	1.00
		Too steep for surface application	1.00	Slope	1.00	Large stones on the surface	1.00
		Stone content	0.76	Stone content	0.96	Too steep for surface application	1.00
		Cobble content	0.06	Cobble content	0.23	Too steep for sprinkler application	1.00

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
52:							
Waybe	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Restricted permeability	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
				Slope	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	0.96
53:							
Davtone	45	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	0.21
Forsey	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Cobble content	1.00	Too steep for sprinkler application	1.00
		Cobble content	1.00	Restricted permeability	1.00	Cobble content	0.32
		Stone content	0.82	Stone content	0.86	Large stones on the surface	0.18
						Filtering capacity	0.01
54:							
Deaver	50	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Sodium content	0.32	Depth to bedrock	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	0.96
						Sodium content	0.32
Avalon	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.50	Slope	1.00	Too steep for sprinkler application	0.50
						Restricted permeability	0.21

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
55:							
Deaver	60	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Restricted permeability	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
		Sodium content	0.32	Slope	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	0.96
						Sodium content	0.32
Chipeta	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Restricted permeability	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Depth to bedrock	1.00	Restricted permeability	1.00
		Sodium content	0.50	Slope	1.00	Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
						Sodium content	0.50
56:							
Debone	90	Very limited		Very limited		Very limited	
		Sodium content	1.00	Restricted permeability	1.00	Sodium content	1.00
		Seepage	1.00			Restricted permeability	1.00
57:							
Detra	50	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	0.92
		Too steep for surface application	0.06	Slope	0.88	Too steep for sprinkler application	0.06
Cortyzack	40	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	0.92
		Too steep for surface application	0.06	Slope	0.88	Too steep for sprinkler application	0.06
						Filtering capacity	0.01

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
58:							
Diaflats	45	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.50	Slope	1.00	Too steep for sprinkler application	0.50
Fondillas	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Stone content	0.97	Stone content	1.00	Too steep for sprinkler application	0.50
		Too steep for surface application	0.50	Slope	1.00		
59:							
Dranyon	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00	Slope	1.00	Too steep for surface application	1.00
		Too acid	0.42			Too steep for sprinkler application	1.00
						Too acid	0.42
						Restricted permeability	0.21
60:							
Dumps, mine	100	Not rated		Not rated		Not rated	
61:							
Ecklund	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Filtering capacity	1.00
		Depth to bedrock	1.00	Slope	0.88	Depth to bedrock	1.00
		Too steep for surface application	0.06	Restricted permeability	0.31	Too steep for surface application	0.92
						Too steep for sprinkler application	0.06
Tipperary	40	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Slope	0.88	Filtering capacity	1.00
		Too steep for surface application	0.06			Too steep for surface application	0.92
						Too steep for sprinkler application	0.06

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
62:							
Eghelm	90	Very limited		Somewhat limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	0.31	Filtering capacity	0.01
		Flooding	0.40				
63:							
Eghelm, moist	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to saturated zone	1.00	Filtering capacity	1.00
		Flooding	0.40	Restricted permeability	0.31		
64:							
Emlin	85	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	0.92
		Too steep for surface application	0.06	Slope	0.88	Restricted permeability	0.21
						Too steep for sprinkler application	0.06
65:							
Emlin	65	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	0.68
				Slope	0.50	Restricted permeability	0.21
Tymosling	20	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Restricted permeability	1.00	Depth to bedrock	1.00
		Too steep for surface application	0.78	Depth to bedrock	1.00	Restricted permeability	1.00
		Seepage	0.69	Slope	1.00	Too steep for surface application	1.00
						Too steep for sprinkler application	0.78
						Large stones on the surface	0.18
66:							
Evanot	90	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	0.92
		Too steep for surface application	0.06	Slope	0.88	Restricted permeability	0.21
						Too steep for sprinkler application	0.06

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
67:							
Evanot	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	0.21
68:							
Evanot	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Slope	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	0.21
Yamo	25	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Slope	1.00	Too steep for sprinkler application	1.00
69:							
Fenster	45	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.22	Slope	1.00	Too steep for sprinkler application	0.22
Thenipel	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.22	Slope	1.00	Too steep for sprinkler application	0.22
70:							
Fluvaquents, frequently flooded	50	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
		Seepage	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Restricted permeability	1.00		
		Cobble content	0.34	Cobble content	0.39		

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
70: Haplaquolls, frequently flooded	45	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Filtering capacity	1.00
		Seepage	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Restricted permeability	1.00	Flooding	1.00
71: Flygare, dry	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Cobble content	0.46	Cobble content	0.99	Too steep for sprinkler application	1.00
		Too acid	0.42	Stone content	0.06	Too acid	0.42
		Stone content	0.03			Restricted permeability	0.21
72: Foidel, cool	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00	Slope	1.00	Too steep for surface application	1.00
		Too acid	0.42			Too steep for sprinkler application	1.00
						Too acid	0.42
						Restricted permeability	0.21
73: Foidel	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too acid	0.42			Too steep for sprinkler application	1.00
						Too acid	0.42
						Restricted permeability	0.21

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
74:							
Foidel, moist-------	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00	Slope	1.00	Too steep for surface application	1.00
		Too acid	0.42			Too steep for sprinkler application	1.00
						Too acid	0.42
						Restricted permeability	0.21
Flygare----------	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00	Slope	1.00	Too steep for surface application	1.00
		Cobble content	0.46	Cobble content	0.99	Too steep for sprinkler application	1.00
		Too acid	0.42	Stone content	0.06	Too acid	0.42
		Stone content	0.03			Restricted permeability	0.21
Skyway, moist-------	20	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	0.31	Too steep for sprinkler application	1.00
						Filtering capacity	0.01
75:							
Fonce----------	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Filtering capacity	1.00
				Slope	0.12	Too steep for surface application	0.32
76:							
Fonce----------	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Filtering capacity	1.00
		Too steep for surface application	0.22	Slope	1.00	Too steep for surface application	1.00
				Cobble content	0.03	Too steep for sprinkler application	0.22

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
77:							
Forelle	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.22	Slope	1.00	Too steep for sprinkler application	0.22
						Filtering capacity	0.01
78:							
Forelle	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
						Filtering capacity	0.01
79:							
Forelle	50	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	0.92
		Too steep for surface application	0.06	Slope	0.88	Too steep for sprinkler application	0.06
						Filtering capacity	0.01
Evanot	40	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	0.92
		Too steep for surface application	0.06	Slope	0.88	Restricted permeability	0.21
						Too steep for sprinkler application	0.06
80:							
Forelle	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
						Filtering capacity	0.01

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
80:							
Evanot	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	0.21
81:							
Forelle	40	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	0.32
				Slope	0.12		
Obadia	35	Very limited		Very limited		Very limited	
		Sodium content	1.00	Restricted permeability	1.00	Sodium content	1.00
		Seepage	1.00	Slope	0.12	Restricted permeability	1.00
						Too steep for surface application	0.32
						Filtering capacity	0.01
82:							
Forelle	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Slope	1.00	Too steep for sprinkler application	1.00
Pinelli	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Slope	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	0.96
Maysprings	15	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00	Slope	1.00	Too steep for surface application	1.00
						Too steep for sprinkler application	1.00

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
83:							
Forsey	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Cobble content	1.00	Too steep for surface application	1.00
		Cobble content	1.00	Restricted permeability	1.00		
		Too steep for surface application	1.00	Slope	1.00	Too steep for sprinkler application	1.00
		Stone content	0.82	Stone content	0.86		
						Cobble content	0.32
						Large stones on the surface	0.18
						Filtering capacity	0.01
Libeg	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.50	Slope	1.00		
		Cobble content	0.22	Cobble content	0.93	Too steep for sprinkler application	0.50
84:							
Gebson, moist	55	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Large stones on the surface	1.00
		Too steep for surface surface application	1.00	Slope	1.00	Too steep for surface application	1.00
		Stone content	0.01			Too steep for sprinkler application	1.00
						Cobble content	0.04
						Filtering capacity	0.01
Youga	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.78	Slope	1.00	Too steep for sprinkler application	0.78
						Filtering capacity	0.01
85:							
Giarch	90	Very limited		Very limited		Very limited	
		Sodium content	1.00	Restricted permeability	1.00	Sodium content	1.00
		Seepage	1.00	Depth to saturated zone	1.00	Filtering capacity	1.00
		Flooding	0.40			Restricted permeability	1.00

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
86:							
Gracot	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00			Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
						Cobble content	0.04
Maybell	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00			Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
87:							
Gretdivid	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
Taffom	25	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
						Filtering capacity	0.01
Abor	15	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
				Depth to bedrock	1.00	Restricted permeability	1.00
						Too steep for sprinkler application	1.00

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
88:							
Grieves	85	Very limited		Somewhat limited		Somewhat limited	
		Seepage	1.00	Slope	0.88	Too steep for surface application	0.92
		Too steep for surface application	0.06	Restricted permeability	0.31	Too steep for sprinkler application	0.06
						Filtering capacity	0.01
89:							
Grieves	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	0.31	Too steep for sprinkler application	1.00
						Filtering capacity	0.01
90:							
Grieves	45	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	0.31	Too steep for sprinkler application	1.00
						Filtering capacity	0.01
Crestman	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Restricted permeability	0.31	Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
91:							
Grieves	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	0.31	Too steep for sprinkler application	1.00
						Filtering capacity	0.01

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
91:							
Yamo	25	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.50	Slope	1.00	Too steep for sprinkler application	0.50
Crestman	20	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Restricted permeability	0.31	Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
92:							
Grimm	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00	Cobble content	1.00	Too steep for surface application	1.00
		Cobble content	1.00			Too steep for sprinkler application	1.00
						Cobble content	1.00
Ustic Torriorthents, shallow	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
		Cobble content	0.04	Cobble content	0.22	Cobble content	1.00
						Filtering capacity	0.01
93:							
Gullied land	85	Not rated		Very limited		Not rated	
				Restricted permeability	1.00		
				Slope	1.00		
				Flooding	0.60		

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
94:							
Hapney, moist-------	90	Very limited		Very limited		Very limited	
		Sodium content	1.00	Restricted permeability	1.00	Sodium content	1.00
		Seepage	1.00	Depth to saturated zone	1.00	Restricted permeability	0.96
						Filtering capacity	0.01
95:							
Haterton------------	60	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Sodium content	0.32	Slope	1.00	Sodium content	0.32
		Too steep for surface application	0.22			Too steep for sprinkler application	0.22
Piezon--------------	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.22	Slope	1.00	Too steep for sprinkler application	0.22
96:							
Heathcoat-----------	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Large stones on the surface	1.00
		Stone content	0.17	Stone content	0.03	Restricted permeability	0.96
						Too steep for surface application	0.08
97:							
Heathcoat-----------	60	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Slope	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	0.96
Clayburn------------	25	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Slope	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	0.21

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
98:							
Herm	50	Very limited		Very limited		Very limited	
		Too steep for surface application	1.00	Slope	1.00	Too steep for surface application	1.00
		Stone content	0.87	Restricted permeability	1.00	Large stones on the surface	1.00
		Seepage	0.69	Stone content	0.36	Too steep for sprinkler application	1.00
						Restricted permeability	0.96
Fughes	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Large stones on the surface	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Stone content	1.00	Stone content	0.66	Too steep for sprinkler application	1.00
						Restricted permeability	0.96
99:							
Hesperus, dry	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.50	Slope	1.00	Too steep for sprinkler application	0.50
						Restricted permeability	0.21
						Filtering capacity	0.01
100:							
Hesperus	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	0.21

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
101:							
Hesperus	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Slope	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	0.21
102:							
Holter	55	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Large stones on the surface	1.00
		Stone content	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Stone content	1.00	Too steep for sprinkler application	1.00
		Cobble content	0.17	Cobble content	0.34	Restricted permeability	0.21
						Filtering capacity	0.01
Detra	30	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	0.92
		Too steep for surface application	0.06	Slope	0.88	Restricted permeability	0.21
						Too steep for sprinkler application	0.06
						Filtering capacity	0.01
103:							
Iles	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.22	Slope	1.00	Restricted permeability	0.96
						Too steep for sprinkler application	0.22

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
104:							
Ironco	60	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Large stones on the surface	1.00
		Too steep for surface application	1.00	Stone content	1.00	Too steep for surface application	1.00
		Stone content	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
		Cobble content	0.12	Cobble content	0.12	Cobble content	0.12
						Filtering capacity	0.01
Mulgon, dry	25	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Stone content	1.00	Stone content	1.00	Too steep for sprinkler application	1.00
		Too acid	0.42	Cobble content	0.34	Too acid	0.42
		Cobble content	0.27			Restricted permeability	0.21
105:							
Ironsprings	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.22	Restricted permeability	0.31	Too steep for sprinkler application	0.22
						Filtering capacity	0.01
106:							
Ironsprings	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.22	Restricted permeability	0.31	Too steep for sprinkler application	1.00
						Filtering capacity	0.01

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
107:							
Ironsprings	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	0.31	Too steep for sprinkler application	1.00
						Filtering capacity	0.01
Maysprings	25	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
Gretdivid	15	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
108:							
Jerry	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00	Slope	1.00	Restricted permeability	1.00
		Too acid	0.42			Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
						Too acid	0.42
Cochetopa	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Slope	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	0.96

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
109:							
Joebas	60	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Slope	1.00	Too steep for sprinkler application	1.00
						Filtering capacity	0.01
Rock outcrop	30	Not rated		Not rated		Not rated	
110:							
Kemmerer	80	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
				Depth to bedrock	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	1.00
111:							
Kemmerer	50	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Seepage	0.69	Depth to bedrock	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	1.00
Grapit	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
		Stone content	0.50	Stone content	0.50	Cobble content	0.98
		Cobble content	0.09	Cobble content	0.07	Large stones on the surface	0.50
						Filtering capacity	0.01

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
112:							
Kemmerer	45	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
				Depth to bedrock	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	1.00
Moyerson	40	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
				Depth to bedrock	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	0.96
113:							
Kemmerer	60	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Restricted permeability	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Depth to bedrock	1.00	Restricted permeability	1.00
				Slope	1.00	Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
Yamo	20	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Slope	1.00	Too steep for sprinkler application	1.00
114:							
Lamphier	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00	Slope	1.00	Too steep for surface application	1.00
		Too acid	0.42			Too steep for sprinkler application	1.00
						Too acid	0.42

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
115:							
Lamphier	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too acid	0.42			Too steep for sprinkler application	1.00
						Too acid	0.42
116:							
Lamphier	45	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00	Slope	1.00	Too steep for surface application	1.00
		Too acid	0.42			Too steep for sprinkler application	1.00
						Too acid	0.42
Jerry	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Restricted permeability	1.00
		Too steep for surface application	1.00	Slope	1.00	Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
117:							
Lamphier	45	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too acid	0.42			Too steep for sprinkler application	1.00
						Too acid	0.42
Jerry	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	1.00

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
118:							
Lander	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Filtering capacity	1.00
		Depth to saturated zone	0.43	Depth to saturated zone	1.00	Depth to saturated zone	0.43
		Flooding	0.40			Restricted permeability	0.21
119:							
Langspring	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.22	Slope	1.00	Too steep for sprinkler application	0.22
		Sodium content	0.02			Sodium content	0.02
120:							
Layoint	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Restricted permeability	0.31	Too steep for surface application	0.32
				Slope	0.12	Filtering capacity	0.01
Moosed	25	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Filtering capacity	1.00
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Too steep for surface application	0.94	Restricted permeability	0.31	Too steep for surface application	1.00
						Too steep for sprinkler application	0.94
Berlake	20	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.22	Slope	1.00	Too steep for sprinkler application	0.22
						Filtering capacity	0.01

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
121:							
Leaps	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Filtering capacity	1.00
		Too steep for surface application	0.50	Slope	1.00	Restricted permeability	1.00
		Too acid	0.42			Too steep for surface application	1.00
						Too steep for sprinkler application	0.50
						Too acid	0.42
122:							
Leswill	50	Very limited		Very limited		Very limited	
		Sodium content	1.00	Restricted permeability	1.00	Sodium content	1.00
		Seepage	0.69			Restricted permeability	0.21
						Too steep for surface application	0.08
Rogrube	30	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Restricted permeability	0.21
		Sodium content	0.18			Sodium content	0.18
						Too steep for surface application	0.08
123:							
Lilsnake	45	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Slope	1.00	Too steep for sprinkler application	1.00
Sandwash	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	0.92
		Cobble content	0.98	Cobble content	1.00	Too steep for sprinkler application	0.06
		Too steep for surface application	0.06	Slope	0.88		

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
124:							
Losee	45	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Stone content	1.00		
				Restricted permeability	1.00	Too steep for sprinkler application	1.00
		Stone content	1.00	Cobble content	0.50		
		Cobble content	0.50			Large stones on the surface	1.00
						Cobble content	0.50
						Filtering capacity	0.01
Thornburgh, dry	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Cobble content	1.00		
				Stone content	0.99		
		Cobble content	1.00	Restricted permeability	0.31	Too steep for sprinkler application	1.00
		Stone content	1.00				
						Cobble content	1.00
						Large stones on the surface	1.00
						Filtering capacity	0.01
125:							
Massadona	85	Not limited		Very limited		Very limited	
				Restricted permeability	1.00	Restricted permeability	1.00
				Slope	0.50	Too steep for surface application	0.68
126:							
Massadona	65	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Restricted permeability	1.00
				Slope	0.12	Too steep for surface application	0.32
Youngston, moist	20	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Restricted permeability	0.21
		Flooding	0.40				
		Sodium content	0.18			Sodium content	0.18

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
127:							
Maudlin	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.50	Slope	1.00	Too steep for sprinkler application	0.50
						Filtering capacity	0.01
Duffymont	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Stone content	1.00	Large stones on the surface	1.00
		Stone content	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.50	Cobble content	0.50	Too steep for sprinkler application	0.50
		Cobble content	0.06	Restricted permeability	0.31	Cobble content	0.50
128:							
Maybell	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	0.22			Too steep for surface application	1.00
						Too steep for sprinkler application	0.22
129:							
Maybell	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00			Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
130:							
Maysprings	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Filtering capacity	1.00
		Too steep for surface application	0.22	Slope	1.00	Too steep for surface application	1.00
						Too steep for sprinkler application	0.22

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
131:							
Maysprings	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
Gretdivid	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
132:							
Milren	80	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Restricted permeability	0.96
				Slope	0.12	Too steep for surface application	0.32
133:							
Miracle	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.22	Slope	1.00	Too steep for sprinkler application	0.22
						Filtering capacity	0.01
Coldspring	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
		Depth to bedrock	0.71	Restricted permeability	1.00	Depth to bedrock	0.71
		Too steep for surface application	0.22	Slope	1.00	Too steep for sprinkler application	0.22

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
134:							
Morapos	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.22	Slope	1.00	Restricted permeability	0.96
						Too steep for sprinkler application	0.22
135:							
Morapos	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	0.96
136:							
Morapos	40	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.69	Restricted permeability	1.00	Restricted permeability	0.96
		Too steep for surface application	0.06	Slope	0.88	Too steep for surface application	0.92
						Too steep for sprinkler application	0.06
Pagoda	40	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Restricted permeability	0.96
		Too steep for surface application	0.06	Slope	0.88	Too steep for surface application	0.92
						Too steep for sprinkler application	0.06
137:							
Morset	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.22	Slope	1.00	Too steep for sprinkler application	0.22
						Filtering capacity	0.01

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
137:							
Youga	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.22	Slope	1.00	Too steep for sprinkler application	0.22
						Filtering capacity	0.01
138:							
Moyerson	50	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
				Depth to bedrock	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	0.96
Rentsac	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Cobble content	0.68	Too steep for sprinkler application	1.00
		Cobble content	0.07	Restricted permeability	0.31	Filtering capacity	0.01
139:							
Muggins	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00	Slope	1.00	Too steep for surface application	1.00
		Too acid	0.42			Too steep for sprinkler application	1.00
						Restricted permeability	0.96
						Too acid	0.42
140:							
Ninot	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
140:							
Crago	20	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00		
		Cobble content	0.29	Cobble content	0.61	Too steep for sprinkler application	1.00
						Cobble content	0.50
Garlips	15	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00		
						Too steep for sprinkler application	1.00
						Restricted permeability	0.21
141:							
Nortez, cool	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.22	Slope	1.00	Restricted permeability	0.96
						Too steep for sprinkler application	0.22
Morapos	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.22	Slope	1.00	Restricted permeability	0.96
						Too steep for sprinkler application	0.22
142:							
Nortez, cool	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Depth to bedrock	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	0.96

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
142:							
Morapos	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	0.96
143:							
Nunemaker	90	Somewhat limited		Very limited		Very limited	
		Seepage	0.69	Restricted permeability	1.00	Restricted permeability	1.00
		Too steep for surface application	0.22	Slope	1.00	Too steep for surface application	1.00
						Too steep for sprinkler application	0.22
144:							
Pagoda	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	0.96
145:							
Pagoda	85	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.69	Restricted permeability	1.00	Restricted permeability	0.96
		Too steep for surface application	0.06	Slope	0.88	Too steep for surface application	0.92
						Too steep for sprinkler application	0.06
146:							
Pavillion	60	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Slope	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	0.21

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
146:							
Degater	25	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Restricted permeability	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Depth to bedrock	1.00	Restricted permeability	1.00
				Slope	1.00	Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
147:							
Peeler	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00	Slope	1.00	Too steep for surface application	1.00
		Too acid	0.42			Too steep for sprinkler application	1.00
		Cobble content	0.01			Too acid	0.42
148:							
Pilotpeak	45	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.22	Restricted permeability	0.31	Too steep for sprinkler application	0.22
						Filtering capacity	0.01
Grubrob	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	0.08
						Filtering capacity	0.01
149:							
Pinelli	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.22	Slope	1.00	Restricted permeability	0.96
						Too steep for sprinkler application	0.22

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
150:							
Pinelli	85	Somewhat limited		Very limited		Very limited	
		Seepage	0.69	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.50	Slope	1.00	Restricted permeability	0.96
						Too steep for sprinkler application	0.50
151:							
Pinelli, dry	85	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Restricted permeability	0.96
				Slope	0.50	Too steep for surface application	0.68
152:							
Pinridge	85	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	0.92
		Flooding	0.40	Slope	0.88	Too steep for sprinkler application	0.06
		Too steep for surface application	0.06				
153:							
Pricecreek	85	Somewhat limited		Very limited		Very limited	
		Seepage	0.69	Restricted permeability	1.00	Restricted permeability	1.00
		Sodium content	0.08			Sodium content	0.08
154:							
Quealman	90	Very limited		Somewhat limited		Somewhat limited	
		Flooding	1.00	Flooding	0.60	Flooding	0.60
		Seepage	1.00	Restricted permeability	0.31	Filtering capacity	0.01
155:							
Rencot	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Cobble content	1.00	Cobble content	1.00
		Cobble content	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Slope	1.00	Too steep for sprinkler application	1.00

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
155:							
Duffymont	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Stone content	1.00	Large stones on the surface	1.00
		Stone content	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Cobble content	0.50	Too steep for sprinkler application	1.00
		Cobble content	0.05	Restricted permeability	0.31	Cobble content	0.50
156:							
Rentsac	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Cobble content	0.52	Too steep for sprinkler application	1.00
		Cobble content	0.03	Restricted permeability	0.31	Filtering capacity	0.01
157:							
Rentsac	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Cobble content	0.75	Too steep for sprinkler application	1.00
		Cobble content	0.10	Restricted permeability	0.31	Cobble content	0.12
						Filtering capacity	0.01
Moyerson	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
				Depth to bedrock	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	0.96
158:							
Rock outcrop	70	Not rated		Not rated		Not rated	

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
158:							
Earsman	20	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Large stones on the surface	1.00
		Stone content	1.00	Stone content	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Cobble content	0.50	Too steep for sprinkler application	1.00
		Cobble content	0.05	Restricted permeability	0.31	Cobble content	0.50
159:							
Rock outcrop	50	Not rated		Not rated		Not rated	
Haploborolls	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	0.31	Too steep for sprinkler application	1.00
		Stone content	0.01	Stone content	0.04	Filtering capacity	0.01
				Cobble content	0.01		
160:							
Rock outcrop	70	Not rated		Not rated		Not rated	
Torriorthents	25	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Stone content	1.00	Too steep for sprinkler application	1.00
		Stone content	0.98	Restricted permeability	0.61	Cobble content	0.04
		Cobble content	0.07	Cobble content	0.41	Filtering capacity	0.01
161:							
Rock River	85	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Filtering capacity	0.01
162:							
Rock River	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.22	Slope	1.00	Too steep for sprinkler application	0.22
						Filtering capacity	0.01

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
163:							
Rock River----------	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
						Filtering capacity	0.01
164:							
Rock River----------	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Slope	1.00	Too steep for sprinkler application	1.00
						Filtering capacity	0.01
Taffom--------------	25	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Slope	1.00	Too steep for sprinkler application	1.00
						Filtering capacity	0.01
165:							
Rogrube sandy loam----------	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.22	Slope	1.00	Too steep for sprinkler application	0.22
		Sodium content	0.18			Restricted permeability	0.21
						Sodium content	0.18
						Filtering capacity	0.01
Rogrube clay loam----------	25	Somewhat limited		Very limited		Very limited	
		Seepage	0.69	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.22	Slope	1.00	Too steep for sprinkler application	0.22
		Sodium content	0.18			Restricted permeability	0.21
						Sodium content	0.18

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
166:							
Routt	80	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00	Slope	1.00	Too steep for surface application	1.00
		Too acid	0.42			Too steep for sprinkler application	1.00
						Restricted permeability	0.96
						Too acid	0.42
167:							
Routt	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application surface	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	0.96
Cochetopa	25	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	0.96
Binco	20	Very limited		Very limited		Very limited	
		Too steep for surface application	1.00	Slope	1.00	Too steep for surface application	1.00
				Restricted permeability	1.00	Restricted permeability	1.00
						Too steep for sprinkler application	1.00
						Cobble content	0.50
						Large stones on the surface	0.18
168:							
Ruedloff	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Restricted permeability	0.31	Filtering capacity	1.00
				Slope	0.12	Too steep for surface application	0.32

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
169:							
Ruedloff	60	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00	Restricted permeability	0.31	Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
Dunul	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for	1.00	Cobble content	0.01		
		Too steep for surface application	1.00	Cobble content	0.01	Too steep for surface application	1.00
		Cobble content	0.01			Too steep for sprinkler application	1.00
170:							
Ryan Park	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.50	Restricted permeability	0.31	Too steep for sprinkler application	0.50
						Filtering capacity	0.01
171:							
Ryan Park	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Restricted permeability	0.31	Filtering capacity	1.00
172:							
Ryan Park	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	0.31	Too steep for sprinkler application	1.00
						Filtering capacity	0.01
Coyet	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	0.31	Too steep for sprinkler application	1.00
						Filtering capacity	0.01

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
173:							
Ryark	65	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	0.50	Restricted permeability	0.31	Too steep for surface application	1.00
						Too steep for sprinkler application	0.50
Powderwash	20	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Filtering capacity	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Too steep for surface application	0.50	Slope	1.00	Restricted permeability	1.00
						Too steep for surface application	1.00
						Too steep for sprinkler application	0.50
174:							
Ryark	70	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Slope	0.88	Filtering capacity	1.00
		Too steep for surface application	0.06	Restricted permeability	0.31	Too steep for surface application	0.92
						Too steep for sprinkler application	0.06
Maybell	15	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Slope	0.88	Filtering capacity	1.00
		Too steep for surface application	0.06			Too steep for surface application	0.92
						Too steep for sprinkler application	0.06
175:							
Sandwash	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	0.08
		Cobble content	0.03	Cobble content	0.16		
Langspring	30	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	0.08
		Sodium content	0.02			Sodium content	0.02

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
175:							
Baston	20	Very limited		Very limited		Very limited	
		Sodium content	1.00	Restricted permeability	1.00	Sodium content	1.00
		Seepage	1.00			Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Restricted permeability	1.00
						Too steep for surface application	0.08
176:							
Schooner	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Filtering capacity	1.00
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00			Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
Rock outcrop	35	Not rated		Not rated		Not rated	
177:							
Schooner	55	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Filtering capacity	1.00
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00			Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
Tricera	25	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	0.78	Restricted permeability	0.31	Too steep for surface application	1.00
						Too steep for sprinkler application	0.78
178:							
Simanni	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Filtering capacity	1.00
				Slope	0.50	Too steep for surface application	0.68

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
178:							
Ruedloff	40	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Slope	0.50	Filtering capacity	1.00
				Restricted permeability	0.31	Too steep for surface application	0.68
179:							
Skyway, dry	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	0.31	Too steep for sprinkler application	1.00
						Filtering capacity	0.01
180:							
Spool	55	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	0.31	Too steep for sprinkler application	1.00
						Filtering capacity	0.01
Maybell	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	0.78			Too steep for surface application	1.00
						Too steep for sprinkler application	0.78
181:							
Stunner	90	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	0.32
				Slope	0.12	Filtering capacity	0.01

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
182:							
Stunner, moist------	55	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	0.92
		Too steep for surface application	0.06	Slope	0.88	Restricted permeability	0.21
						Too steep for sprinkler application	0.06
Emlin----------	35	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	0.92
		Too steep for surface application	0.06	Slope	0.88	Restricted permeability	0.21
						Too steep for sprinkler application	0.06
183:							
Styers----------	45	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
				Depth to bedrock	1.00	Restricted permeability	1.00
						Too steep for sprinkler application	1.00
Ironsprings---------	25	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	0.31	Too steep for sprinkler application	1.00
						Filtering capacity	0.01
Maysprings----------	15	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
						Too steep for sprinkler application	1.00

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
184:							
Styers	40	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
				Depth to bedrock	1.00	Restricted permeability	1.00
						Too steep for sprinkler application	1.00
Pinelli	20	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	0.96
						Filtering capacity	0.01
Taffom	15	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
						Filtering capacity	0.01
185:							
Taffom	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface	0.50	Slope	1.00	Too steep for sprinkler application	0.50
						Filtering capacity	0.01
186:							
Talamantes	85	Very limited		Very limited		Not limited	
		Seepage	1.00	Restricted permeability	1.00		
187:							
Talamantes	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.94	Slope	1.00	Too steep for sprinkler application	0.94

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
188:							
Talamantes, saline	85	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Salinity	0.50
		Sodium content	0.18			Restricted permeability	0.21
						Sodium content	0.18
						Too steep for surface application	0.08
189:							
Tipper	55	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00			Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
Crustown	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00			Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
190:							
Tipperary	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00			Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
191:							
Tipperary	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	0.22			Too steep for surface application	1.00
						Too steep for sprinkler application	0.22

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
192:							
Tipperary	50	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Slope	0.88	Filtering capacity	1.00
		Too steep for surface application	0.06			Too steep for surface application	0.92
						Too steep for sprinkler application	0.06
Willwood	40	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Slope	0.88	Filtering capacity	1.00
		Too steep for surface application	0.06			Too steep for surface application	0.92
						Too steep for sprinkler application	0.06
193:							
Tisworth	85	Very limited		Very limited		Very limited	
		Sodium content	1.00	Restricted permeability	1.00	Sodium content	1.00
		Seepage	1.00			Restricted permeability	0.96
				Slope	0.12	Too steep for surface application	0.32
						Filtering capacity	0.01
194:							
Tolman	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Large stones on the surface	1.00
		Stone content	1.00	Stone content	1.00		
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Cobble content	0.09	Cobble content	0.42	Too steep for sprinkler application	1.00
						Cobble content	0.32
Duffymont	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Large stones on the surface	1.00
		Stone content	1.00	Stone content	1.00		
		Too steep for surface application	1.00	Cobble content	0.50	Too steep for surface application	1.00
		Cobble content	0.06	Restricted permeability	0.31	Too steep for sprinkler application	1.00
						Cobble content	0.50

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
195:							
Torriorthents-------	95	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Stone content	1.00		
				Restricted permeability	0.61	Too steep for sprinkler application	1.00
		Stone content	1.00				
		Sodium content	0.32			Large stones on the surface	1.00
						Sodium content	0.32
196:							
Torriorthents-------	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Stone content	1.00	Large stones on the surface	1.00
		Stone content	1.00	Slope	1.00		
		Sodium content	0.32	Restricted permeability	0.61	Too steep for surface application	1.00
		Too steep for surface application	0.22			Sodium content	0.32
						Too steep for sprinkler application	0.22
Baston--------------	35	Very limited		Very limited		Very limited	
		Sodium content	1.00	Restricted permeability	1.00	Sodium content	1.00
		Seepage	1.00			Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Restricted permeability	1.00
		Too steep for surface application	0.22	Slope	1.00		
						Too steep for surface application	1.00
						Too steep for sprinkler application	0.22
197:							
Torriorthents-------	60	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Stone content	1.00		
				Restricted permeability	0.61	Too steep for sprinkler application	1.00
		Stone content	0.98	Cobble content	0.30		
		Cobble content	0.07			Cobble content	0.04
						Filtering capacity	0.01
Rock outcrop, sandstone----------	30	Not rated		Not rated		Not rated	

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
198:							
Torriorthents-------	60	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Seepage	0.38	Depth to bedrock	1.00	Too steep for sprinkler application	1.00
		Sodium content	0.32				
		Salinity	0.13			Salinity	1.00
						Restricted permeability	0.43
Rock outcrop, shale--------------	40	Not rated		Not rated		Not rated	
199:							
Torriorthents-------	60	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
		Seepage	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
Torripsamments------	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00			Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
200:							
Tresano-------------	80	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.22	Slope	1.00	Too steep for sprinkler application	0.22
						Filtering capacity	0.01
201:							
Tresano-------------	35	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	0.92
		Too steep for surface application	0.06	Slope	0.88	Too steep for sprinkler application	0.06

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
201:							
Hiatha	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Restricted permeability	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Depth to bedrock	1.00	Restricted permeability	1.00
		Seepage	0.69	Slope	1.00	Too steep for surface application	1.00
		Sodium content	0.08			Too steep for sprinkler application	1.00
						Sodium content	0.08
Kandaly	15	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Slope	0.88	Filtering capacity	1.00
		Sodium content	0.08			Too steep for surface application	0.92
		Too steep for surface application	0.06			Sodium content	0.08
		Too steep for	0.06			Too steep for sprinkler application	0.06
202:							
Turzo	90	Very limited		Very limited		Not limited	
		Seepage	1.00	Restricted permeability	1.00		
203:							
Turzo, saline	90	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Sodium content	0.98
		Sodium content	0.98	Slope	0.12	Too steep for surface application	0.32
204:							
Typic Natrargids	80	Very limited		Very limited		Very limited	
		Sodium content	1.00	Restricted permeability	1.00	Sodium content	1.00
		Seepage	1.00			Restricted permeability	1.00
205:							
Uffens	90	Very limited		Very limited		Very limited	
		Sodium content	1.00	Restricted permeability	1.00	Sodium content	1.00
		Seepage	0.69			Filtering capacity	1.00
						Restricted permeability	0.96

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
206:							
Ustorthents, frigid	55	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Stone content	1.00		
				Cobble content	1.00		
		Stone content	1.00	Restricted permeability	0.61	Too steep for sprinkler application	1.00
		Cobble content	1.00				
						Large stones on the surface	1.00
Borolls	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Depth to bedrock	1.00		
		Stone content	0.64	Stone content	0.64	Too steep for sprinkler application	1.00
						Restricted permeability	0.96
207:							
Vermillion	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Slope	1.00		
						Too steep for sprinkler application	1.00
Langspring	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Slope	1.00		
		Sodium content	0.02			Too steep for sprinkler application	1.00
						Sodium content	0.02
208:							
Wallson	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.50	Restricted permeability	0.61		
						Too steep for sprinkler application	0.50
						Filtering capacity	0.01

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
208:							
Tricera	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	0.50	Restricted permeability	0.31	Too steep for surface application	1.00
						Too steep for sprinkler application	0.50
209:							
Weed	85	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	0.92
		Too steep for surface application	0.06	Slope	0.88	Too steep for sprinkler application	0.06
						Filtering capacity	0.01
210:							
Willwood	55	Very limited		Very limited		Very limited	
		Seepage	1.00	Cobble content	1.00	Filtering capacity	1.00
		Cobble content	1.00	Slope	0.88	Too steep for surface application	0.92
		Stone content	0.18	Restricted permeability	0.31	Too steep for sprinkler application	0.06
		Too steep for surface application	0.06	Stone content	0.27		
Sheppard, cool	35	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Slope	0.88	Filtering capacity	1.00
		Too steep for surface application	0.06	Restricted permeability	0.31	Too steep for surface application	0.92
						Too steep for sprinkler application	0.06
211:							
Willwood	55	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00	Cobble content	1.00	Too steep for surface application	1.00
		Cobble content	1.00	Stone content	0.40	Too steep for sprinkler application	1.00
		Stone content	0.35			Cobble content	1.00

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
211:							
Tipperary	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00			Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
212:							
Willwood	60	Very limited		Very limited		Very limited	
		Seepage	1.00	Cobble content	1.00	Filtering capacity	1.00
		Cobble content	1.00	Slope	0.88	Too steep for surface application	0.92
		Stone content	0.12	Restricted permeability	0.31	Too steep for sprinkler application	0.06
		Too steep for surface application	0.06	Stone content	0.22		
Tipperary, cobbly Substratum	25	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Slope	0.88	Filtering capacity	1.00
		Too steep for surface application	0.06	Restricted permeability	0.31	Too steep for surface application	0.92
				Cobble content	0.01	Too steep for sprinkler application	0.06
213:							
Winevada	60	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Slope	1.00	Too steep for sprinkler application	1.00
Splitro	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Filtering capacity	1.00
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Restricted permeability	0.31	Too steep for surface application	1.00
		Too acid	0.42			Too steep for sprinkler application	1.00
						Too acid	0.42

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
214:							
Winevada	60	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too acid	0.42			Too steep for sprinkler application	1.00
						Too acid	0.42
Splitro	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Restricted permeability	0.31	Too steep for surface application	1.00
		Too acid	0.42			Too steep for sprinkler application	1.00
						Too acid	0.42
215:							
Winkleman	85	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.69	Restricted permeability	1.00	Restricted permeability	0.96
		Flooding	0.40				
		Depth to saturated zone	0.24	Depth to saturated zone	1.00	Depth to saturated zone	0.24
216:							
Yamo	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.50	Slope	1.00	Too steep for sprinkler application	0.50
217:							
Yamo	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
218:							
Yellowwash----------	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.78	Slope	1.00	Salinity	1.00
		Salinity	0.03			Too steep for sprinkler application	0.78
Piezon----------	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.78	Slope	1.00	Too steep for sprinkler application	0.78
219:							
Youga----------	90	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.50	Slope	1.00	Too steep for sprinkler application	0.50
						Restricted permeability	0.21
220:							
Youga----------	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.22	Slope	1.00	Too steep for sprinkler application	0.22
						Filtering capacity	0.01
Dinnen----------	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.22	Restricted permeability	0.31	Too steep for sprinkler application	0.22
						Filtering capacity	0.01

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
221:							
Youga	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
						Large stones on the surface	1.00
						Filtering capacity	0.01
Gelkie	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Large stones on the surface	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Stone content	0.01			Too steep for sprinkler application	1.00
						Filtering capacity	0.01
Clayburn, warm	20	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too acid	0.42			Too steep for sprinkler application	1.00
						Too acid	0.42
222:							
Youngston, cool	90	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Depth to saturated zone	1.00	Sodium content	0.32
		Flooding	0.40				
		Sodium content	0.32	Restricted permeability	1.00		
223:							
Youngston, well drained	90	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Restricted permeability	0.21
		Flooding	0.40			Sodium content	0.18
		Sodium content	0.18				
224:							
Zillion	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
				Stone content	0.91		
		Cobble content	0.61	Cobble content	0.88		
		Stone content	0.36				

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
224:							
Barkelew, moist-----	25	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00		
		Cobble content	1.00	Cobble content	1.00	Too steep for sprinkler application	1.00
						Cobble content	0.75
						Restricted permeability	0.21
Grapit----------	20	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00		
		Stone content	0.23	Stone content	0.31	Too steep for sprinkler application	1.00
		Cobble content	0.01	Cobble content	0.02		
225:							
Abracon----------	45	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	0.68
		Sodium content	0.50	Slope	0.50	Sodium content	0.50
Solirec----------	40	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	0.68
				Slope	0.50		
226:							
Arches----------	45	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Filtering capacity	1.00
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00			Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
Mespun----------	20	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00			Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
Rock outcrop--------	20	Not rated		Not rated		Not rated	

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
227:							
Bankard family------	55	Very limited		Not limited		Very limited	
		Seepage	1.00			Filtering capacity	1.00
		Flooding	0.40				
Cameo---------------	35	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Restricted permeability	0.31	Filtering capacity	1.00
		Flooding	0.40				
228:							
Bondman-------------	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Slope	1.00	Too steep for sprinkler application	1.00
Rock outcrop--------	35	Not rated		Not rated		Not rated	
229:							
Cameo---------------	85	Very limited		Somewhat limited		Very limited	
		Seepage	1.00	Restricted permeability	0.31	Filtering capacity	1.00
		Flooding	0.40				
230:							
Cragnot-------------	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Slope	1.00		
				Stone content	0.97	Too steep for sprinkler application	1.00
		Stone content	0.99	Cobble content	0.02		
		Cobble content	0.05			Large stones on the surface	0.92
Pensore-------------	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Cobble content	0.99		
				Stone content	0.92		
				Restricted permeability	0.61	Too steep for sprinkler application	1.00
		Cobble content	0.67				
		Stone content	0.59				
Grapit--------------	15	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00		
				Cobble content	1.00	Too steep for sprinkler application	1.00
		Stone content	0.68	Stone content	0.71		
		Cobble content	0.42				

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
231:							
Green River	70	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Depth to saturated zone	1.00	Sodium content	0.82
		Sodium content	0.82	Restricted permeability	0.61	Depth to saturated zone	0.43
		Depth to saturated zone	0.43			Filtering capacity	0.01
		Flooding	0.40				
Fluvaquents	15	Very limited		Very limited		Very limited	
		Flooding	1.00	Ponding	1.00	Filtering capacity	1.00
		Seepage	1.00	Flooding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00			Flooding	1.00
232:							
Lakebench	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00	Restricted permeability	0.31	Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
Strell	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Filtering capacity	1.00
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00			Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
233:							
Lakebench	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	0.31	Too steep for sprinkler application	1.00
						Filtering capacity	0.01

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
233:							
Yampa	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Slope	1.00	Cobble content	1.00
		Cobble content	1.00	Cobble content	1.00	Too steep for sprinkler application	1.00
		Stone content	0.97	Stone content	0.99	Large stones on the surface	0.92
						Filtering capacity	0.01
234:							
Mantlemine	85	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	0.32
				Slope	0.12		
235:							
Mantlemine	55	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	0.92
		Too steep for surface application	0.06	Slope	0.88	Too steep for sprinkler application	0.06
Emlin	30	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	0.92
		Too steep for surface application	0.06	Slope	0.88	Restricted permeability	0.21
						Too steep for sprinkler application	0.06
236:							
Mido	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	0.22			Too steep for surface application	1.00
						Too steep for sprinkler application	0.22
237:							
Mikim loam	55	Very limited		Very limited		Not limited	
		Seepage	1.00	Restricted permeability	1.00		
Mikim silt loam	35	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Sodium content	0.68
		Sodium content	0.68			Salinity	0.50

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
238:							
Milok	85	Very limited		Somewhat limited		Somewhat limited	
		Seepage	1.00	Slope	0.50	Too steep for surface application	0.68
				Restricted permeability	0.31		
						Filtering capacity	0.01
239:							
Milok	45	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	0.31		
						Too steep for sprinkler application	1.00
						Filtering capacity	0.01
Solirec	25	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00		
						Too steep for sprinkler application	1.00
Strych	15	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Stone content	1.00	Stone content	1.00		
		Too steep for surface application	1.00	Cobble content	0.69		
				Restricted permeability	0.61	Too steep for sprinkler application	1.00
		Cobble content	0.82				
						Cobble content	0.87
240:							
Milok	70	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	0.31		
						Too steep for sprinkler application	1.00
						Filtering capacity	0.01
Strych	20	Very limited		Very limited		Very limited	
		Seepage	1.00	Cobble content	1.00	Filtering capacity	1.00
		Cobble content	1.00	Slope	1.00		
		Too steep for surface application	1.00	Restricted permeability	0.31	Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
						Cobble content	0.87

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
241:							
Pensore	60	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Cobble content	0.99		
				Stone content	0.92		
		Cobble content	0.67	Restricted permeability	0.61	Too steep for sprinkler application	1.00
		Stone content	0.59				
Roto	25	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Stone content	0.99		
				Restricted permeability	0.61	Too steep for sprinkler application	1.00
		Stone content	0.82	Cobble content	0.01		
						Large stones on the surface	0.92
242:							
Riverwash	85	Not rated		Not rated		Not rated	
243:							
Rizno	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Cobble content	0.87		
				Restricted permeability	0.31	Too steep for sprinkler application	1.00
		Cobble content	0.38				
						Cobble content	0.87
						Filtering capacity	0.01
Windcomb	35	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Restricted permeability	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
				Slope	1.00		
		Seepage	0.69			Too steep for sprinkler application	1.00
						Restricted permeability	0.21
Anasazi	15	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	0.31		
				Stone content	0.06	Too steep for sprinkler application	1.00
		Stone content	0.01				
						Filtering capacity	0.01

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
244:							
Rock outcrop--------	60	Not rated		Not rated		Not rated	
Hackling----------	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Cobble content	1.00		
				Stone content	0.88		
		Cobble content	1.00	Restricted permeability	0.31	Too steep for sprinkler application	1.00
		Stone content	0.48				
						Large stones on the surface	0.18
						Filtering capacity	0.01
245:							
Rock outcrop--------	30	Not rated		Not rated		Not rated	
Torriorthents-------	30	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Slope	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
				Stone content	0.92		
		Seepage	1.00	Restricted permeability	0.71	Too steep for sprinkler application	1.00
		Stone content	0.62				
						Large stones on the surface	0.92
Ustorthents---------	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00		
				Cobble content	0.87	Too steep for sprinkler application	1.00
		Cobble content	0.66				
						Cobble content	0.87
246:							
Schoonover----------	55	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Slope	1.00		
						Too steep for sprinkler application	1.00

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
246:							
Duffymont	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Cobble content	1.00	Cobble content	1.00
		Cobble content	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	0.31	Too steep for sprinkler application	1.00
						Filtering capacity	0.01
247:							
Stout	60	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	0.31	Too steep for sprinkler application	1.00
						Filtering capacity	0.01
Rock outcrop	30	Not rated		Not rated		Not rated	
248:							
Strych	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Stone content	1.00	Too steep for surface application	1.00
		Stone content	1.00	Slope	1.00	Too steep for sprinkler application	1.00
		Too steep for surface application	1.00	Cobble content	0.69	Cobble content	0.87
		Cobble content	0.82	Restricted permeability	0.61		
Mellenthin	35	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Stone content	1.00	Large stones on the surface	1.00
		Stone content	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Cobble content	0.50	Too steep for sprinkler application	1.00
		Cobble content	0.05	Restricted permeability	0.31	Cobble content	0.50
249:							
Zillion	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
		Cobble content	0.97	Cobble content	1.00		
		Stone content	0.17	Stone content	0.74		

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
249:							
Yampa	25	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
		Cobble content	1.00	Cobble content	1.00	Cobble content	1.00
		Stone content	0.97	Stone content	0.99	Large stones on the surface	0.92
						Filtering capacity	0.01
Clyl	20	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Stone content	1.00	Too steep for sprinkler application	1.00
		Stone content	0.74	Restricted permeability	1.00		
		Cobble content	0.01	Cobble content	0.39		
250:							
Abracon	85	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	0.68
		Sodium content	0.50	Slope	0.50	Sodium content	0.50
251:							
Badland	60	Not rated		Very limited		Not rated	
				Slope	1.00		
				Restricted permeability	1.00		
				Depth to bedrock	1.00		
Renegade	25	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Large stones on the surface	1.00
		Too steep for surface application	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
		Stone content	1.00	Stone content	1.00	Too steep for sprinkler application	1.00
		Cobble content	0.65	Cobble content	0.73	Cobble content	0.87
		Depth to bedrock	0.01	Restricted permeability	0.31	Depth to bedrock	0.01

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
252:							
Bigtom	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Cobble content	1.00	Cobble content	1.00	Too steep for sprinkler application	1.00
		Stone content	1.00	Stone content	1.00	Too acid	0.42
		Too acid	0.42			Restricted permeability	0.21
Namlot	20	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Cobble content	1.00
		Too steep for surface application	1.00	Cobble content	1.00	Too steep for surface application	1.00
		Cobble content	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
						Large stones on the surface	0.18
Dokie	15	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for	1.00	Stone content	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
		Stone content	1.00	Cobble content	0.98	Too acid	0.42
		Cobble content	0.94				
		Too acid	0.42				
253:							
Clapper	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	0.61	Too steep for sprinkler application	1.00
		Stone content	0.16	Stone content	0.03	Sodium content	0.08
		Sodium content	0.08				
254:							
Cliff	85	Very limited		Somewhat limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	0.31	Sodium content	0.68
		Sodium content	0.68			Filtering capacity	0.01

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
255:							
Clyl	45	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Stone content	1.00		
				Restricted permeability	1.00	Too steep for sprinkler application	1.00
		Stone content	1.00	Cobble content	0.83		
		Cobble content	0.24			Filtering capacity	0.01
Pinerid	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00		
				Cobble content	0.04	Too steep for sprinkler application	1.00
						Large stones on the surface	0.92
256:							
Cortyzack	65	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Slope	1.00		
						Too steep for sprinkler application	1.00
Diagulch	20	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Filtering capacity	1.00
		Too steep for surface application	0.50	Slope	1.00	Too steep for surface application	1.00
						Too steep for sprinkler application	0.50
257:							
Cortyzack	55	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Slope	1.00		
						Too steep for sprinkler application	1.00

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
257:							
Duffymont	30	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Cobble content	1.00	Cobble content	1.00
		Cobble content	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	0.31	Too steep for sprinkler application	1.00
						Filtering capacity	0.01
258:							
Cortyzack	45	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Slope	1.00	Too steep for sprinkler application	1.00
Flynncove	45	Very limited		Very limited		Very limited	
		Seepage	1.00	Cobble content	1.00	Too steep for surface application	1.00
		Cobble content	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
		Too steep for surface application	1.00	Slope	1.00	Cobble content	0.12
		Stone content	0.07	Stone content	0.10		
259:							
Denco	45	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Restricted permeability	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
		Seepage	0.39	Slope	1.00	Too steep for sprinkler application	1.00
						Restricted permeability	0.96
Gerst	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Slope	1.00	Too steep for sprinkler application	1.00

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
260:							
Dokie	70	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00	Stone content	1.00	Too steep for surface application	1.00
		Stone content	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
		Cobble content	0.94	Cobble content	0.98	Too acid	0.42
		Too acid	0.42				
Flynncove	15	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Large stones on the surface	1.00
		Too steep for surface application	1.00	Stone content	1.00	Too steep for surface application	1.00
		Stone content	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
		Cobble content	1.00	Cobble content	1.00	Cobble content	1.00
261:							
Dokie	50	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Filtering capacity	1.00
		Too steep for surface application	1.00	Stone content	1.00	Too steep for surface application	1.00
		Stone content	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
		Cobble content	0.94	Cobble content	0.98	Too acid	0.42
		Too acid	0.42				
Namlot	40	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Cobble content	1.00
		Too steep for surface application	1.00	Cobble content	1.00	Too steep for surface application	1.00
		Cobble content	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
						Large stones on the surface	0.18

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
262:							
Gompers	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	0.61	Too steep for sprinkler application	1.00
		Sodium content	0.50			Sodium content	0.50
						Filtering capacity	0.01
263:							
Hanksville	85	Very limited		Very limited		Very limited	
		Depth to bedrock	1.00	Restricted permeability	1.00	Depth to bedrock	1.00
		Too steep for surface application	1.00	Depth to bedrock	1.00	Restricted permeability	1.00
		Sodium content	0.50	Slope	1.00	Too steep for surface application	1.00
						Too steep for sprinkler application	1.00
						Sodium content	0.50
264:							
Mikim	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.50	Slope	1.00	Too steep for sprinkler application	0.50
		Sodium content	0.08			Sodium content	0.08
265:							
Mikim	85	Very limited		Very limited		Very limited	
		Seepage	1.00	Restricted permeability	1.00	Sodium content	1.00
		Sodium content	1.00			Salinity	0.50
266:							
Rock outcrop	40	Not rated		Not rated		Not rated	
Boxring	25	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Large stones on the surface	1.00
		Too steep for surface application	1.00	Cobble content	1.00	Too steep for surface application	1.00
		Stone content	1.00	Restricted permeability	1.00	Too steep for sprinkler application	1.00
		Cobble content	1.00	Stone content	1.00	Cobble content	1.00

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
266:							
Tridell	25	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Cobble content	1.00
		Too steep for surface application	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Cobble content	1.00	Cobble content	1.00	Too steep for sprinkler application	1.00
						Large stones on the surface	0.18
267:							
Solirec	35	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	0.68
				Slope	0.50	Filtering capacity	0.01
Abracon	30	Very limited		Very limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	1.00	Too steep for surface application	0.68
		Sodium content	0.50	Slope	0.50	Sodium content	0.50
Begay	20	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Too steep for surface application	1.00
		Too steep for surface application	0.50	Restricted permeability	0.31	Too steep for sprinkler application	0.50
		Sodium content	0.18			Sodium content	0.18
						Filtering capacity	0.01
268:							
Toliver	55	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Large stones on the surface	1.00
		Too steep for surface application	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
		Stone content	1.00	Stone content	1.00	Too steep for sprinkler application	1.00
		Cobble content	0.65	Cobble content	0.74	Cobble content	1.00
				Restricted permeability	0.31	Filtering capacity	0.01
Rock outcrop	30	Not rated		Not rated		Not rated	

Table 19.--Agricultural waste management: Overland flow, Rapid infiltration, and Slow rate treatment of wastewater--Continued

Map symbol and soil name	Pct. of map unit	Overland flow of wastewater		Rapid infiltration of wastewater		Slow rate treatment of wastewater	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
269:							
Walknolls	60	Very limited		Very limited		Very limited	
		Seepage	1.00	Slope	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Depth to bedrock	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Restricted permeability	0.31	Too steep for sprinkler application	1.00
		Sodium content	0.50			Sodium content	0.50
						Cobble content	0.04
Badland	15	Not rated		Very limited		Not rated	
				Slope	1.00		
				Restricted permeability	1.00		
				Depth to bedrock	1.00		
Rock outcrop	10	Not rated		Not rated		Not rated	
270:							
Walknolls	55	Very limited		Very limited		Very limited	
		Seepage	1.00	Depth to bedrock	1.00	Depth to bedrock	1.00
		Depth to bedrock	1.00	Restricted permeability	1.00	Too steep for surface application	1.00
		Too steep for surface application	1.00	Slope	1.00	Too steep for sprinkler application	1.00
		Sodium content	0.50			Sodium content	0.50
						Filtering capacity	0.01
Gilston	35	Very limited		Somewhat limited		Somewhat limited	
		Seepage	1.00	Restricted permeability	0.31	Sodium content	0.68
		Sodium content	0.68	Slope	0.12	Too steep for surface application	0.32
						Filtering capacity	0.01
271:							
Water	95	Not rated		Not rated		Not rated	

Table 20.--Engineering index properties

(Absence of an entry indicates that the data were not estimated.)

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
1:												
Abor	0-4	Silty clay loam	ML	A-7	0	0	100	100	95-100	85-95	40-50	10-20
	4-37	Silty clay, clay	CH	A-7	0	0	100	100	95-100	85-95	50-65	30-40
	37-41	Weathered bedrock			---	---	---	---	---	---	---	---
2:												
Abor	0-4	Silty clay loam	ML	A-7	0	0	100	100	95-100	85-95	40-50	10-20
	4-37	Silty clay, clay	CH	A-7	0	0	100	100	95-100	85-95	50-65	30-40
	37-41	Weathered bedrock			---	---	---	---	---	---	---	---
3:												
Adderton	0-22	Loam	CL, CL-ML	A-4	0	0	85-100	80-100	75-95	55-85	25-30	5-10
	22-39	Loam, clay loam	CL, CL-ML	A-4, A-6	0	0	85-100	80-100	75-95	60-85	25-35	5-15
	39-60	Fine sandy loam, loam	CL, CL-ML, SC, SC-SM	A-4	0	0	85-100	80-100	75-95	40-70	20-30	5-10
4:												
Almy	0-6	Loam	CL-ML	A-4	0	0	95-100	95-100	85-95	60-70	25-30	5-10
	6-30	Clay loam, loam, sandy clay loam	CL	A-6	0	0	95-100	95-100	85-95	60-80	30-35	10-15
	30-60	Loam, fine sandy loam	CL-ML	A-4	0	0	95-100	95-100	85-95	55-75	25-30	5-10
5:												
Apmay	0-17	Clay loam	CL	A-6	0	0	90-100	90-100	85-95	70-80	30-35	10-15
	17-30	Clay loam, loam, sandy clay loam	CL, CL-ML	A-4, A-6	0	0	90-100	85-100	70-90	50-75	25-35	5-15
	30-60	Extremely gravelly sand	GP, GW	A-1	0-10	15-40	40-65	25-50	5-15	0-5	---	NP
6:												
Avalon	0-3	Fine sandy loam	CL-ML, SC, SC-SM	A-4	0	0	90-100	85-100	80-95	35-55	25-30	5-10
	3-12	Clay loam	CL, CL-ML	A-4	0	0	90-100	90-100	80-100	55-80	25-30	5-10
	12-60	Clay loam, gravelly clay loam	CL, SC	A-4	0	0-5	80-100	65-90	60-90	35-75	25-30	5-10

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
6:												
Mack----------	0-4	Loam	CL, CL-ML	A-4	0	0	90-100	90-100	85-95	70-80	25-30	5-10
	4-13	Clay loam	CL	A-6	0	0	90-100	90-100	90-95	75-85	30-40	10-20
	13-42	Clay loam, loam	CL, CL-ML	A-4	0	0	90-100	90-100	85-95	70-85	20-30	5-15
	42-60	Gravelly loam, gravelly clay loam, loam	CL, CL-ML	A-4	0	0	75-95	70-95	65-90	50-80	25-40	5-15
7:												
Avalon----------	0-3	Loam	CL	A-6	0	0	95-100	95-100	90-95	65-75	30-35	10-15
	3-36	Clay loam, loam	CL-ML	A-4	0	0	95-100	95-100	90-95	75-85	25-30	5-10
	36-43	Channery clay loam, clay loam	CL	A-6	0	10-15	75-85	70-80	65-80	40-75	30-35	10-15
	43-47	Weathered bedrock			---	---	---	---	---	---	---	---
Persayo, moist----------	0-2	Channery loam	CL-ML, CL	A-4, A-6	0	5-20	80-90	75-90	70-85	50-75	20-30	5-15
	2-10	Loam, clay loam	CL, CL-ML	A-4	0	0-5	95-100	90-100	85-90	70-80	20-30	5-15
	10-14	Weathered bedrock			---	---	---	---	---	---	---	---
Degater----------	0-1	Clay	CH, CL	A-7	0	0	100	100	95-100	85-90	40-55	20-35
	1-20	Clay, silty clay	CH, CL	A-7	0	0	85-100	80-100	75-100	70-95	40-55	15-30
	20-38	Clay, silty clay, clay loam, silty clay loam	CH, CL	A-6, A-7	0	0	100	100	95-100	70-100	30-55	15-35
	38-42	Weathered bedrock			---	---	---	---	---	---	---	---
8:												
Badland----------	0-2	Silty clay, clay	CH, CL	A-7-6	0-10	0-25	75-100	70-100	70-100	65-95	35-55	15-40
	2-12	Weathered bedrock			---	---	---	---	---	---	---	---
9:												
Baroid----------	0-3	Loamy fine sand	SM	A-2	0	0	90-100	90-100	70-85	30-50	20-25	NP-5
	3-47	Stratified fine sand to fine sandy loam	SC-SM, SM	A-2, A-4	0	0	90-100	90-100	60-85	20-45	20-25	NP-5
	47-60	Loam			---	---	---	---	---	---	---	---

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
9:												
Eghelm----------	0-4	Fine sandy loam	SC-SM	A-4	0	0	95-100	90-100	80-90	40-50	20-25	5-10
	4-21	Stratified fine sandy loam to sandy clay loam	SC, SC-SM	A-2-4, A-4	0	0	95-100	90-100	80-90	30-50	20-30	5-10
	21-60	Fine sandy loam	SC, SC-SM	A-2-4, A-4	0	0	95-100	90-100	80-90	30-40	20-30	5-10
10:												
Battlement------	0-3	Fine sandy loam	SC, SC-SM	A-4	0	0	95-100	95-100	85-90	45-50	25-30	5-10
	3-60	Stratified sandy loam to silty clay loam	CL, CL-ML	A-4, A-6	0	0	90-100	80-100	70-85	50-75	25-35	5-15
11:												
Battlement, saline---------	0-4	Silt loam	ML	A-4	0	0	100	100	95-100	80-85	30-35	5-10
	4-17	Stratified loam to silty clay loam	CL, CL-ML	A-4, A-6	0	0	100	100	90-100	80-90	25-35	5-15
	17-30	Stratified loam to silty clay loam	CL, CL-ML	A-4, A-6	0	0	100	100	90-100	80-90	25-35	5-15
	30-60	Stratified sandy loam to loam	CL, CL-ML	A-4	0	0	100	100	85-95	50-75	20-30	5-10
12:												
Berlake---------	0-10	Sandy loam	SC-SM	A-2, A-4	0	0	95-100	90-100	50-70	20-40	25-30	5-10
	10-23	Sandy clay loam	SC, SC-SM	A-4	0	0	95-100	90-100	80-90	35-55	25-30	5-10
	23-31	Sandy loam, coarse sandy loam	SC-SM	A-2, A-4	0	0	95-100	80-100	50-70	20-40	25-30	5-10
	31-60	Loamy sand, gravelly loamy sand, loamy coarse sand	SM	A-1	0	0	65-90	60-85	35-45	15-25	20-25	NP-5

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
13:												
Berlake---------	0-10	Sandy loam	SC-SM	A-2, A-4	0	0	95-100	90-100	50-70	20-40	25-30	5-10
	10-23	Sandy clay loam	SC, SC-SM	A-4	0	0	95-100	90-100	80-90	35-55	25-30	5-10
	23-31	Sandy loam, coarse sandy loam	SC-SM	A-2, A-4	0	0	95-100	80-100	50-70	20-40	25-30	5-10
	31-60	Loamy sand, gravelly loamy sand, loamy coarse sand	SM	A-1	0	0	65-90	60-85	35-45	15-25	20-25	NP-5
14:												
Berlake---------	0-10	Coarse sandy loam	SC-SM	A-2, A-4	0	0	95-100	90-100	50-70	20-40	25-30	5-10
	10-25	Sandy clay loam	SC, SC-SM	A-4	0	0	95-100	90-100	80-90	35-55	25-30	5-10
	25-33	Coarse sandy loam, sandy loam	SC-SM	A-2, A-4	0	0	95-100	80-100	50-70	20-40	25-30	5-10
	33-60	Loamy coarse sand, loamy sand, gravelly loamy sand	SM	A-1	0	0	65-90	60-85	35-45	15-25	20-25	NP-5
Maysprings------	0-6	Coarse sandy loam	SC, SC-SM	A-2-4	0	0	90-100	80-95	50-60	20-30	25-30	5-10
	6-22	Sandy clay loam, sandy loam	SC, SC-SM	A-2, A-4	0	0	95-100	85-100	50-75	25-50	25-35	5-10
	22-29	Coarse sandy loam	SM	A-2-4, A-4	0	0	90-100	85-95	50-60	30-40	20-25	NP-5
	29-60	Coarse sand, loamy coarse sand, gravelly coarse sand	SM, SP-SM	A-1	0	0	80-100	75-90	20-50	5-20	---	NP
15:												
Berlake---------	0-14	Coarse sandy loam	SC, SC-SM	A-2	0	0	100	95-100	60-70	25-35	25-30	5-10
	14-57	Sandy clay loam	CL-ML, SC, SC-SM	A-4	0	0	100	95-100	80-100	45-60	25-30	5-10
	57-60	Sandy loam, sandy clay loam	CL-ML, SC-SM	A-4	0	0	100	95-100	65-80	35-60	20-30	5-10

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
15:												
Taffom----------	0-7	Coarse sandy loam	SC, SC-SM	A-2-4	0	0	100	90-100	60-70	25-35	25-30	5-10
	7-41	Sandy clay loam	CL, CL-ML, SC	A-4	0	0	100	85-100	80-90	35-55	25-30	5-10
	41-60	Loamy sand, sandy loam, loam	SC-SM, SM	A-2-4, A-4	0	0	100	80-100	40-55	15-50	15-25	NP-5
Gretdivid-------	0-3	Loamy coarse sand	SM	A-2, A-1	0	0	95-100	85-95	45-70	15-25	20-25	NP-5
	3-7	Sandy clay loam, sandy loam	CL, SC, SC-SM	A-4	0	0	95-100	90-100	60-90	35-55	25-30	5-10
	7-60	Coarse sand, gravelly coarse sand, loamy coarse sand	SM, SP-SM	A-1	0	0	60-100	55-90	20-40	5-15	---	NP
16:												
Bilhil----------	0-12	Clay loam	CL	A-6	0	0	100	100	90-100	85-95	35-40	15-20
	12-23	Clay, silty clay, clay loam	CH, CL	A-7	0	0	100	100	90-100	85-95	40-55	15-30
	23-60	Clay, silty clay, clay loam	CH, CL	A-7	0	0	100	100	90-100	85-95	40-55	15-30
17:												
Binco-----------	0-2	Gravelly clay loam	CL, GC, SC	A-6	5-10	15-35	70-80	60-75	50-75	40-60	35-40	15-20
	2-9	Clay loam, clay	CL	A-6, A-7	0-5	0-10	90-100	85-95	80-90	65-80	35-45	15-25
	9-60	Clay	CH, CL	A-7	0	0	95-100	95-100	90-100	70-90	40-65	15-40
18:												
Boltus----------	0-3	Silty clay loam	ML	A-7	0	0	95-100	95-100	95-100	85-100	40-45	10-15
	3-17	Silty clay, silty clay loam	MH, ML	A-7	0	0	95-100	95-100	95-100	85-100	40-55	15-25
	17-21	Weathered bedrock			---	---	---	---	---	---	---	---

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
18:												
Beamton---------	0-2	Silty clay loam	ML	A-7	0	0	95-100	95-100	90-100	85-95	40-50	10-20
	2-26	Silty clay loam, silty clay	ML	A-7	0	0	95-100	95-100	90-100	85-95	40-50	15-20
	26-33	Silty clay loam, silty clay	ML	A-7	0	0	95-100	95-100	90-100	85-95	40-50	15-20
	33-37	Weathered bedrock			---	---	---	---	---	---	---	---
19:												
Borollic Natrargids-----	0-5	Fine sandy loam	CL, CL-ML, SC, SC-SM	A-4	0	0	95-100	95-100	70-85	40-55	25-30	5-10
	5-45	Silty clay loam, clay loam, clay, silty clay	CL	A-6, A-7	0	0	95-100	95-100	90-100	65-95	30-45	10-20
	45-60	Sandy clay loam, clay loam, clay	CL	A-6, A-7	0	0	95-100	95-100	85-100	65-95	25-45	10-25
Borollic Haplargids-----	0-2	Sandy loam	SC-SM, SM	A-2, A-4	0	0	95-100	90-100	60-70	30-40	20-25	NP-5
	2-30	Clay, sandy clay loam, clay loam	CL, CL-ML, SC, SC-SM	A-4, A-6	0	0	95-100	90-100	80-95	35-70	25-40	5-20
	30-60	Sandy loam, sandy clay loam, clay loam	CL, CL-ML, SC, SC-SM	A-4, A-6, A-2	0	0	95-100	90-100	60-90	30-55	25-35	5-15
Ustic Torrifluvents--	0-4	Fine sandy loam, silt loam, silty clay loam	CL, CL-ML, SC, SC-SM	A-4	0	0	90-100	90-100	70-85	40-55	25-30	5-10
	4-60	Stratified loamy sand to clay loam	CL-ML, CL, SC, SC-SM	A-4, A-6	0	0	90-100	90-100	65-95	40-85	20-35	5-15

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
20:												
Brownsto---------	0-3	Gravelly loam	SC, SC-SM	A-4	0	0	70-85	60-75	50-65	35-50	25-30	5-10
	3-14	Gravelly loam	SC, SC-SM	A-4	0	0	70-85	60-75	50-65	35-50	25-30	5-10
	14-29	Very cobbly loam, very gravelly sandy clay loam	SC-SM, GC, GC-GM, SC	A-1, A-2	0-10	20-35	45-80	45-75	30-75	20-40	25-30	5-10
	29-60	Very cobbly sandy loam, very gravelly sandy clay loam	GC, GC-GM, SC, SC-SM	A-1, A-2	0-10	20-35	55-80	45-70	30-50	15-30	20-30	NP-10
Castee----------	0-2	Loam	CL, CL-ML	A-4	0	0	95-100	90-100	85-95	60-75	25-30	5-10
	2-32	Loam	CL-ML, ML	A-4	0	0	95-100	90-100	85-95	60-70	20-25	NP-5
	32-53	Gravelly loam, gravelly sandy loam	GC-GM, GM, SC-SM, SM	A-1, A-2, A-4	0	0-10	60-80	55-75	35-70	20-55	20-25	NP-5
	53-60	Gravelly sandy loam, very gravelly sandy loam	GC-GM, GM, SC-SM, SM	A-1, A-2	0-5	5-15	45-75	40-70	25-50	10-30	20-25	NP-5
21:												
Bulkley----------	0-2	Stony loam	CL, CL-ML	A-4	10-15	10-15	90-95	85-90	60-80	45-65	25-30	5-10
	2-33	Clay	CH, CL	A-7	0-5	0-5	95-100	95-100	90-95	75-85	40-65	20-40
	33-60	Clay loam, clay	CL	A-7	0	0	95-100	95-100	85-95	70-80	35-45	15-25
22:												
Bulkley----------	0-4	Silty clay	MH, ML	A-7	0	0	100	100	95-100	90-95	45-55	15-25
	4-36	Clay, silty clay	CH	A-7	0	0	100	100	95-100	90-95	50-65	30-45
	36-60	Silty clay, clay	CH	A-7	0	0	100	100	95-100	90-95	50-65	30-45
23:												
Bulkley----------	0-4	Silty clay	MH, ML	A-7	0	0	100	100	95-100	90-95	45-55	15-25
	4-36	Clay, silty clay	CH	A-7	0	0	100	100	95-100	90-95	50-65	30-45
	36-60	Silty clay, clay	CH	A-7	0	0	100	100	95-100	90-95	50-65	30-45

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
24:												
Bulkley---------	0-3	Very channery clay loam	GC	A-2, A-6	0	15-35	30-55	30-50	30-50	20-40	35-40	15-20
	3-41	Clay, silty clay	CH	A-7	0	0	100	100	95-100	90-95	50-65	30-45
	41-60	Clay, silty clay	CH	A-7	0	0	100	100	95-100	90-95	50-65	30-45
Quilt-----------	0-7	Channery loam	GC-GM, SC-SM	A-4	0	0-10	55-80	55-75	50-65	35-55	25-30	5-10
	7-38	Channery clay loam	CL, GC, SC	A-6	0	10-25	55-80	55-75	50-75	40-60	30-40	10-20
	38-48	Channery clay, channery clay loam	CL	A-6, A-7	0	10-20	55-80	55-75	50-75	40-70	35-45	15-20
	48-60	Channery clay, channery clay loam	CH, CL, GC	A-6, A-7	0	10-20	55-80	55-75	50-75	40-70	35-60	15-35
25:												
Campspass-------	0-2	Fine sandy loam	CL-ML, SC-SM	A-4	0	0	95-100	95-100	80-90	40-55	25-30	5-10
	2-8	Loam	CL, CL-ML	A-4	0	0	95-100	95-100	85-95	60-75	25-30	5-10
	8-20	Clay loam, clay	CL	A-6, A-7	0	0-10	95-100	95-100	90-100	80-90	35-45	15-25
	20-60	Loam, clay loam	CL	A-6	0	0-20	95-100	95-100	85-95	75-85	30-40	10-20
26:												
Campspass-------	0-2	Fine sandy loam	CL-ML, SC-SM	A-4	0	0	95-100	95-100	80-90	40-55	25-30	5-10
	2-8	Loam	CL, CL-ML	A-4	0	0	95-100	95-100	85-95	60-75	25-30	5-10
	8-20	Clay loam, clay	CL	A-6, A-7	0	0-10	95-100	95-100	90-100	80-90	35-45	15-25
	20-60	Loam, clay loam	CL	A-6	0	0-20	95-100	95-100	85-95	75-85	30-40	10-20
27:												
Canlodore-------	0-1	Moderately decomposed plant material	PT		0	0	100	100	---	---	---	---
	1-7	Very cobbly loamy sand	GP-GM, SM, SP-SM	A-1	10-15	20-30	55-70	45-60	30-45	10-20	20-25	NP-5
	7-40	Very cobbly loamy sand, very cobbly sand	GP-GM, SM, SP-SM	A-1	10-15	20-30	55-70	45-60	30-45	5-20	20-25	NP-5
	40-60	Very cobbly sand, very cobbly loamy sand	GP-GM, SM, SP-SM	A-1	10-15	20-30	55-70	45-60	30-40	5-15	---	NP

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
28:												
Carbol----------	0-2	Sandy loam	SC, SC-SM	A-4	0	0	90-95	85-95	60-70	30-40	25-30	5-10
	2-14	Gravelly sandy clay loam, gravelly loam	SC, SC-SM	A-4	0-5	5-15	75-85	65-75	60-70	35-50	25-30	5-10
	14-18	Unweathered bedrock			---	---	---	---	---	---	---	---
Irigul----------	0-6	Channery loam	CL-ML, GC-GM, SC-SM	A-4	0-10	0-25	55-80	55-75	50-70	35-55	25-30	5-10
	6-15	Very channery loam	GC, GC-GM	A-1, A-2, A-4	0-15	0-30	30-55	30-50	25-50	20-40	25-30	5-10
	15-19	Unweathered bedrock			---	---	---	---	---	---	---	---
Rock outcrop----	0-60	Unweathered bedrock			---	---	---	---	---	---	0-14	---
29:												
Carbol----------	0-2	Sandy loam	SC, SC-SM	A-4	0	0	90-95	85-95	60-70	30-40	25-30	5-10
	2-14	Gravelly sandy clay loam, gravelly loam	SC, SC-SM	A-4	0-5	5-15	75-85	65-75	60-70	35-50	25-30	5-10
	14-18	Unweathered bedrock			---	---	---	---	---	---	---	---
Miracle---------	0-8	Sandy loam	CL, CL-ML, SC, SC-SM	A-4	0	0	80-100	75-100	60-85	30-55	25-30	5-10
	8-37	Sandy clay loam, loam, clay loam	CL-ML, CL	A-6	0-5	0-10	85-100	80-100	70-90	50-75	25-35	5-15
	37-41	Unweathered bedrock			---	---	---	---	---	---	---	---
30:												
Carmody---------	0-3	Loamy fine sand	SM	A-2, A-4	0	0	95-100	90-100	50-80	25-50	20-25	NP-5
	3-23	Fine sandy loam	SC-SM, SM	A-4	0	0	95-100	90-100	75-85	35-45	20-25	NP-5
	23-27	Weathered bedrock			---	---	---	---	---	---	---	---

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
30:												
Rock River------	0-3	Sandy loam	SC, SC-SM	A-2-4, A-4	0	0	95-100	90-100	70-80	30-50	25-30	5-10
	3-22	Sandy clay loam	CL, CL-ML, SC, SC-SM	A-4, A-6	0	0	95-100	90-100	75-85	45-60	25-35	5-15
	22-32	Sandy clay loam, sandy loam	SC, SC-SM	A-4	0	0	95-100	90-100	70-85	35-50	25-30	5-10
	32-60	Sandy loam, loamy sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	90-100	65-80	25-45	20-25	NP-5
Crestman--------	0-2	Loamy sand	SM	A-2	0	0	85-95	80-90	40-75	20-30	20-25	NP-5
	2-14	Gravelly loamy sand, fine sand	SM	A-2	0	0	70-80	65-75	30-65	10-25	20-25	NP-5
	14-18	Weathered bedrock			---	---	---	---	---	---	---	---
31:												
Castee----------	0-2	Loam	CL, CL-ML	A-4	0	0	95-100	90-100	85-95	60-75	25-30	5-10
	2-32	Loam	CL-ML, ML	A-4	0	0	95-100	90-100	85-95	60-70	20-25	NP-5
	32-53	Gravelly loam, gravelly sandy loam	GC-GM, GM, SC-SM, SM	A-1, A-2, A-4	0	0-10	60-80	55-75	35-70	20-55	20-25	NP-5
	53-60	Gravelly sandy loam, very gravelly sandy loam	GC-GM, GM, SC-SM, SM	A-1, A-2	0-5	5-15	45-75	40-70	25-50	10-30	20-25	NP-5
32:												
Chroder---------	0-3	Sandy loam	SM	A-2, A-4	0	0	90-100	85-100	60-80	25-40	20-25	NP-5
	3-10	Sandy loam	SM	A-4, A-2	0	0	90-100	85-100	60-80	30-40	20-25	NP-5
	10-60	Sandy loam	SM	A-2, A-4	0	0	90-100	80-100	60-80	30-40	20-25	NP-5
33:												
Clayburn, warm----------	0-11	Loam	CL-ML	A-4	0	0	95-100	90-100	80-90	60-70	25-30	5-10
	11-46	Clay loam, sandy clay loam, gravelly sandy clay loam	CL, SC	A-6	0	0	90-100	80-100	70-95	45-85	25-35	10-20
	46-60	Loam, sandy clay loam, gravelly loam	CL, SC	A-6	0	0	90-100	80-100	65-90	45-80	30-35	10-15

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
34:												
Clayburn--------	0-17	Fine sandy loam	SC, SC-SM	A-4	0-5	0-5	85-100	85-100	55-85	35-55	25-30	5-10
	17-31	Sandy clay loam	CL, CL-ML, SC, SC-SM	A-4	0	0-5	85-100	85-100	70-90	35-55	25-30	5-10
	31-60	Fine sandy loam	SC, SC-SM	A-4	0	0	85-100	85-100	70-85	40-55	25-30	5-10
Foidel----------	0-13	Fine sandy loam	SC, SC-SM	A-4	0	0	95-100	95-100	80-90	40-50	25-30	5-10
	13-33	Fine sandy loam, sandy clay loam	CL, CL-ML, SC, SC-SM	A-4	0	0	95-100	95-100	80-90	40-60	25-30	5-10
	33-60	Sandy clay loam	CL, SC	A-6	0	0	95-100	95-100	80-90	35-55	30-40	10-20
35:												
Clayburn--------	0-17	Loam	CL-ML	A-4	0	0	95-100	90-100	80-90	60-70	25-30	5-10
	17-50	Clay loam, sandy clay loam, gravelly sandy clay loam	CL, SC	A-6	0	0	90-100	80-100	70-95	45-85	25-35	10-20
	50-60	Sandy clay loam, loam, gravelly loam	CL, SC	A-6	0	0	90-100	80-100	65-90	45-80	30-35	10-15
Youga, moist----	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	---	---	---	---
	1-14	Loam	CL, CL-ML	A-4	0	0	90-100	85-90	80-85	50-55	20-25	5-10
	14-40	Clay loam	CL	A-6	0	0	90-100	80-90	75-85	65-75	30-40	10-20
	40-60	Sandy clay loam, sandy loam	CL, CL-ML, SC, SC-SM	A-4	0	0	90-100	80-90	75-80	40-55	25-30	5-10
36:												
Clifsand--------	0-2	Loamy sand	SC-SM, SM	A-2	0-5	0-5	90-100	85-95	50-80	20-35	20-25	NP-5
	2-13	Sandy loam	SC, SC-SM	A-2, A-4	0-5	0-5	90-100	85-95	60-75	30-40	20-25	5-10
	13-43	Very cobbly sandy loam, extremely cobbly sandy loam	GC-GM, GM, SC-SM	A-1	10-15	20-50	55-65	40-60	25-50	15-25	20-25	NP-5
	43-60	Extremely stony sand	GP-GM	A-1	30-50	25-30	40-60	35-55	30-40	5-10	---	NP

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
36:												
Chroder---	0-3	Loamy sand	SM	A-2	0	0	90-100	85-100	60-80	20-30	---	NP
	3-10	Sandy loam	SM	A-2, A-4	0	0	90-100	85-100	60-80	30-40	20-25	NP-5
	10-43	Sandy loam	SM	A-2, A-4	0	0	90-100	80-100	60-80	30-40	20-25	NP-5
	43-65	Sandy loam	SM	A-2, A-4	0	0	85-100	80-95	60-75	25-40	20-25	NP-5
37:												
Cochetopa---	0-11	Loam	CL, CL-ML	A-4	0	0	95-100	95-100	95-100	70-80	25-30	5-10
	11-19	Clay loam, loam	CL, CL-ML	A-4, A-6	0-5	0-10	95-100	95-100	90-100	70-85	25-35	5-15
	19-48	Clay loam, clay	CH, CL	A-7	0-5	0-10	95-100	95-100	90-100	75-90	40-55	20-30
	48-60	Clay loam, clay	CL	A-7	0-5	0-10	95-100	90-100	90-100	75-90	40-50	20-30
38:												
Cochetopa---	0-19	Loam	CL, CL-ML	A-4	0	0	95-100	95-100	95-100	70-80	25-30	5-10
	19-48	Clay loam, clay	CH, CL	A-7	0-5	0-10	95-100	95-100	90-100	75-90	40-55	20-30
	48-60	Clay loam, clay	CL	A-7	0-5	0-10	95-100	90-100	90-100	75-90	40-50	20-30
39:												
Cochetopa, warm---	0-11	Loam	CL, CL-ML	A-4	0	0	95-100	95-100	95-100	70-80	25-30	5-10
	11-19	Clay loam, loam	CL-ML, CL	A-4, A-6	0-5	0-10	95-100	95-100	90-100	70-85	25-35	5-15
	19-48	Clay loam, clay	CH, CL	A-7	0-5	0-10	95-100	95-100	90-100	75-90	40-55	20-30
	48-60	Clay loam, clay	CL	A-7	0-5	0-10	95-100	90-100	90-100	75-90	40-50	20-30
40:												
Cochetopa---	0-19	Loam	CL, CL-ML	A-4	0	0	95-100	95-100	95-100	70-80	25-30	5-10
	19-48	Clay loam, clay	CH, CL	A-7	0-5	0-10	95-100	95-100	90-100	75-90	40-55	20-30
	48-60	Clay loam, clay	CL	A-7	0-5	0-10	95-100	90-100	90-100	75-90	40-50	20-30
Gothic---	0-12	Very bouldery loam	CL, CL-ML, SC, SC-SM	A-4	30-50	0-30	80-90	70-80	65-70	45-60	25-30	5-10
	12-17	Cobbly clay loam	CL	A-6	0-10	15-40	75-90	70-85	65-85	50-70	35-40	15-20
	17-42	Clay, clay loam	CH, CL	A-7	0-5	0-15	85-95	85-95	70-80	60-70	40-60	15-35
	42-60	Gravelly clay, clay, clay loam	CH, CL	A-7	0-5	0-15	85-95	75-85	70-80	60-70	40-60	15-35
41:												
Cochetopa---	0-21	Stony loam	CL, CL-ML	A-4	10-45	5-15	75-90	70-85	60-80	45-65	25-30	5-10
	21-51	Clay, clay loam	CH, CL	A-7	0-5	0-10	95-100	95-100	90-100	75-90	40-55	20-30
	51-60	Clay loam, clay	CL	A-7	0-5	0-10	95-100	90-100	90-100	75-90	40-50	20-30

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
41:												
Gothic----------	0-12	Stony loam	CL, CL-ML	A-4	10-15	0-10	85-95	80-90	75-85	60-70	25-30	5-10
	12-17	Cobbly clay loam	CL	A-6	0-10	15-40	75-90	70-85	65-85	50-70	35-40	15-20
	17-42	Clay, clay loam	CH, CL	A-7	0-5	0-15	85-95	85-95	70-80	60-70	40-60	15-35
	42-60	Gravelly clay, clay, clay loam	CH, CL	A-7	0-5	0-15	85-95	75-85	70-80	60-70	40-60	15-35
42:												
Cochetopa-------	0-19	Loam	CL, CL-ML	A-4	0	0	95-100	95-100	95-100	70-80	25-30	5-10
	19-48	Clay loam, clay	CH, CL	A-7	0-5	0-10	95-100	95-100	90-100	75-90	40-55	20-30
	48-60	Clay loam, clay	CL	A-7	0-5	0-10	95-100	90-100	90-100	75-90	40-50	20-30
Jerry-----------	0-10	Very stony loam	CL, CL-ML, SC-SM	A-4	10-25	10-25	75-85	70-80	40-70	40-55	25-30	5-10
	10-31	Clay	CL	A-7	0-10	0-5	95-100	95-100	90-100	80-95	40-50	20-25
	31-60	Clay loam, clay	CL	A-7	0-10	0-5	95-100	95-100	90-100	75-95	40-50	15-25
43:												
Coldspring, moist----------	0-14	Loam	CL, CL-ML	A-4	0	0	95-100	90-100	70-85	45-60	25-30	5-10
	14-34	Clay loam, loam, sandy clay loam	CL	A-6	0	0	90-100	85-100	70-80	55-65	30-40	10-15
	34-47	Gravelly sandy clay loam, loam, sandy loam	SC, SC-SM	A-2, A-4	0	0-15	70-90	60-85	40-55	25-45	20-30	5-10
	47-51	Unweathered bedrock			---	---	---	---	---	---	---	---
44:												
Cowestglen------	0-5	Sandy loam	SC-SM, SM	A-2, A-4	0	0	100	95-100	60-70	30-40	20-25	NP-5
	5-42	Stratified sand to loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	95-100	75-90	40-60	20-25	NP-5
	42-60	Stratified sand to loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	95-100	75-90	40-60	15-25	NP-10

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
45:												
Coyet	0-6	Loamy sand	SC-SM, SM	A-2	0	0	95-100	90-100	85-95	30-35	20-25	NP-5
	6-22	Loamy sand, loamy fine sand	SC-SM, SM	A-2	0	0	85-100	80-100	75-95	30-35	20-25	NP-5
	22-60	Loamy sand, loamy fine sand, sand	SC-SM, SM	A-2	0	0	85-100	80-100	75-90	20-30	15-20	NP-5
46:												
Coyet	0-6	Loamy sand	SC-SM, SM	A-2	0	0	95-100	90-100	85-95	30-35	20-25	NP-5
	6-22	Loamy sand, loamy fine sand	SC-SM, SM	A-2	0	0	85-100	80-100	75-95	30-35	20-25	NP-5
	22-60	Loamy sand, loamy fine sand, sand	SC-SM, SM	A-2	0	0	85-100	80-100	75-90	20-30	15-20	NP-5
47:												
Coyet	0-3	Loamy sand	SM	A-2	0	0	95-100	90-100	85-95	30-35	20-25	NP-5
	3-15	Loamy sand, loamy fine sand	SM	A-2	0	0	85-100	80-100	75-95	30-35	20-25	NP-5
	15-48	Sand, loamy sand, loamy fine sand	SM	A-2	0	0	85-100	80-100	75-90	20-30	15-20	NP-5
	48-52	Weathered bedrock			---	---	---	---	---	---	---	---
Crestman, moist	0-2	Loamy sand	SM	A-2	0	0	85-95	80-90	40-75	20-30	20-25	NP-5
	2-14	Gravelly loamy sand, fine sand	SM	A-2	0	0	70-80	65-75	30-65	10-25	20-25	NP-5
	14-18	Weathered bedrock			---	---	---	---	---	---	---	---

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
48:												
Crago----------	0-2	Very cobbly loam	GC-GM, SC-SM	A-2, A-4	0-10	20-30	45-90	40-85	35-80	25-65	25-30	5-10
	2-57	Very gravelly loam, extremely gravelly sandy clay loam, very gravelly clay loam	GC, GC-GM, GM	A-2	0	15-25	35-55	30-50	25-50	20-40	20-30	NP-10
	57-60	Very cobbly loam, extremely gravelly sandy loam, extremely gravelly sandy clay loam	GC-GM	A-2	0-5	25-40	15-30	10-25	5-20	5-15	25-30	5-10
Pensore---------	0-2	Gravelly loam	SC-SM	A-4	0	0-10	60-80	55-75	50-70	35-55	20-25	5-10
	2-7	Gravelly loam	SC-SM	A-4	0	0-10	60-80	55-75	50-70	35-55	20-25	5-10
	7-17	Very gravelly loam	GC-GM, GM	A-2, A-1	0	10-25	35-55	30-50	25-50	20-35	20-25	NP-5
	17-21	Unweathered bedrock			---	---	---	---	---	---	---	---
Grapit----------	0-3	Channery loam	GC, GC-GM, SC, SC-SM	A-4	0-5	5-15	55-80	55-75	50-70	35-55	25-30	5-10
	3-38	Very channery loam, very gravelly clay loam, very channery clay loam	GC, GC-GM	A-2, A-4	5-15	10-25	30-55	30-50	25-50	20-40	25-30	5-10
	38-60	Very channery clay loam, extremely channery loam, extremely gravelly sandy clay loam	GC, GC-GM	A-1, A-2	5-15	10-25	30-55	20-50	15-45	10-35	20-30	NP-10

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
49:												
Cryoborolls, slumped--------	0-7	Clay loam	CL	A-6	0-10	0-10	90-100	90-100	75-90	60-80	30-35	10-15
	7-35	Clay, clay loam, sandy clay loam	SC, CL	A-6, A-7	0-10	0-10	90-100	90-100	65-95	40-85	25-45	5-20
	35-60	Clay loam, sandy clay loam, clay	CL, SC	A-6, A-7	0-10	0-10	90-100	90-100	65-95	40-85	25-45	5-20
50:												
Cushool---------	0-5	Fine sandy loam	ML, SM	A-4	0	0	95-100	80-100	55-85	35-55	20-30	NP-5
	5-14	Sandy clay loam	CL, SC	A-4, A-6	0	0	75-100	75-100	65-85	35-55	25-35	5-15
	14-25	Fine sandy loam, sandy loam, sandy clay loam	CL, CL-ML, SC, SC-SM	A-4	0	0	75-100	75-100	50-90	30-55	25-30	5-10
	25-29	Unweathered bedrock			---	---	---	---	---	---	---	---
51:												
Cushool---------	0-5	Fine sandy loam	ML, SM	A-4	0	0	95-100	80-100	55-85	35-55	20-30	NP-5
	5-14	Sandy clay loam	CL, SC	A-4, A-6	0	0	75-100	75-100	65-85	35-55	25-35	5-15
	14-25	Fine sandy loam, sandy loam, sandy clay loam	CL, CL-ML, SC, SC-SM	A-4	0	0	75-100	75-100	50-90	30-55	25-30	5-10
	25-29	Unweathered bedrock			---	---	---	---	---	---	---	---
52:												
Danavore--------	0-4	Very cobbly sandy loam	GC, GC-GM, SC, SC-SM	A-1, A-2-4	10-25	25-50	55-65	50-60	40-50	20-30	25-30	5-10
	4-8	Extremely stony sandy loam	GC, GC-GM, GP-GC	A-1, A-2-4	30-50	20-40	45-60	45-55	40-50	10-30	25-30	5-10
	8-22	Extremely channery loam, extremely channery clay loam, very channery clay loam	GC, GC-GM	A-1, A-2, A-2-4	0-10	10-20	35-60	30-55	25-45	20-35	25-35	5-15
	22-26	Weathered bedrock			---	---	---	---	---	---	---	---

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
52:												
Waybe	0-4	Channery silty clay loam	ML	A-7	0	5-10	70-80	65-75	55-75	50-70	40-50	10-20
	4-15	Silty clay loam, clay, channery clay	CL	A-6, A-7	0	0-5	70-100	65-100	60-95	50-80	35-50	15-25
	15-19	Weathered bedrock			---	---	---	---	---	---	---	---
53:												
Davtone	0-6	Loam	CL, CL-ML	A-4	0	0	95-100	90-100	85-95	65-75	25-30	5-10
	6-17	Clay loam, loam	CL, CL-ML	A-4	0	0	90-100	85-100	85-95	65-80	25-35	5-15
	17-30	Clay loam, gravelly clay loam	CL	A-6	0	0-5	90-100	85-100	80-95	50-85	30-35	10-15
	30-60	Cobbly loam	CL, CL-ML	A-4	0-5	10-25	75-85	70-80	60-70	50-60	25-30	5-10
Forsey	0-8	Cobbly sandy loam	SC, SC-SM	A-2-4	5-10	15-30	75-90	70-85	45-60	25-35	25-30	5-10
	8-24	Very cobbly sandy clay loam, very cobbly sandy loam	GC, GC-GM, SC, SC-SM	A-1-b, A-2	10-15	20-45	45-90	40-85	30-70	15-45	25-30	5-10
	24-60	Very cobbly sandy loam	GC, GC-GM, SC, SC-SM	A-1-b, A-2-4	10-15	45-70	45-90	40-85	25-60	15-35	25-30	5-10
54:												
Deaver	0-2	Gravelly silty clay loam	ML	A-7	0	5-10	70-80	65-75	65-75	55-70	40-45	10-15
	2-30	Silty clay, clay	CL	A-7	0	0	75-100	75-100	75-100	70-90	40-50	15-25
	30-34	Weathered bedrock			---	---	---	---	---	---	---	---
Avalon	0-3	Loam	CL, CL-ML	A-4	0	0	95-100	90-95	80-90	60-70	25-30	5-10
	3-12	Clay loam	CL, CL-ML	A-4	0	0	90-100	90-100	80-100	55-80	25-30	5-10
	12-60	Clay loam, gravelly clay loam	CL, SC	A-4	0	0-5	80-100	65-90	60-90	35-75	25-30	5-10

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
55:												
Deaver----------	0-2	Silty clay loam	ML	A-7	0	0	100	100	95-100	90-95	40-50	10-20
	2-35	Silty clay, clay	CL	A-7	0	0	75-100	75-100	75-100	70-90	40-50	15-25
	35-39	Weathered bedrock			---	---	---	---	---	---	---	---
Chipeta---------	0-1	Silty clay loam	ML	A-4, A-7	0	0	100	100	95-100	90-95	30-50	5-20
	1-17	Silty clay, clay	CL	A-7	0	0	100	100	95-100	75-95	40-50	15-25
	17-21	Weathered bedrock			---	---	---	---	---	---	---	---
56:												
Debone----------	0-3	Loam	CL-ML	A-4	0	0	100	100	85-100	55-80	25-30	5-10
	3-14	Clay, clay loam	CH, CL	A-7	0	0	100	100	90-100	70-95	35-55	15-30
	14-35	Clay loam, loam, sandy clay loam	CL	A-6	0	0	100	100	85-100	50-85	25-35	10-20
	35-60	Fine sandy loam, sandy loam	CL-ML, ML, SC-SM, SM	A-2, A-4	0	0	100	90-100	60-85	30-55	20-25	NP-5
57:												
Detra-----------	0-19	Fine sandy loam	SC-SM	A-4	0	0	90-100	90-100	80-90	35-45	25-30	5-10
	19-50	Sandy clay loam	CL, SC	A-6	0	0	90-100	90-100	80-90	35-55	30-40	10-20
	50-60	Sandy clay loam, sandy loam	SC, SC-SM	A-4	0	0	90-100	90-100	80-90	35-50	25-30	5-10
Cortyzack-------	0-9	Fine sandy loam	CL-ML, SC-SM	A-4	0	0	90-100	90-100	70-80	45-55	20-30	5-10
	9-24	Sandy clay loam	CL, SC	A-6	0	0	90-100	90-100	80-90	35-55	30-35	10-15
	24-45	Sandy clay loam, sandy loam	CL, CL-ML, SC, SC-SM	A-4	0	0	90-100	90-100	70-80	45-70	25-30	5-10
	45-60	Sandy clay loam, sandy loam	CL, CL-ML, SC, SC-SM	A-4	0	0	90-100	90-100	70-80	45-70	25-30	5-10
58:												
Diaflats--------	0-2	Loam	CL-ML	A-4	0	0	90-100	90-100	85-95	60-70	25-30	5-10
	2-26	Loam, silt loam, channery loam	CL-ML, GC-GM	A-4	0	0-5	65-90	60-90	50-85	35-70	25-30	5-10
	26-30	Unweathered bedrock			---	---	---	---	---	---	---	---

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
58:												
Fondillas-------	0-5	Loam	CL, CL-ML	A-4	0	0	90-100	80-100	75-85	45-65	25-30	5-10
	5-11	Extremely flaggy loam, extremely channery loam, very channery loam	GC, GC-GM	A-2, A-4	20-50	0-55	50-60	45-55	35-45	30-40	25-30	5-10
	11-15	Unweathered bedrock			---	---	---	---	---	---	---	---
59:												
Dranyon---------	0-2	Slightly decomposed plant material	PT	A-8	0	0	100	100	---	---	---	---
	2-19	Loam	CL-ML	A-4	0	0-10	85-95	80-95	75-85	50-70	25-30	5-10
	19-34	Gravelly sandy clay loam, gravelly clay loam	CL, GC, SC	A-2-6, A-6	0	0-10	60-80	55-75	45-75	20-60	30-35	10-15
	34-60	Gravelly sandy clay loam	GC, SC	A-2-6, A-6	0	0-10	55-75	45-70	45-70	20-40	30-35	10-15
60:												
Dumps, mine-----	0-60	Variable			---	---	---	---	---	---	0-14	---
61:												
Ecklund---------	0-3	Loamy fine sand	SM	A-2	0	0	90-100	90-100	70-80	20-30	20-25	NP-5
	3-24	Loamy fine sand	SM	A-2	0	0	90-100	90-100	70-80	20-30	20-25	NP-5
	24-36	Gravelly fine sand, gravelly loamy fine sand, fine sand	SM	A-1, A-2	0	0-10	60-90	55-85	45-65	15-25	20-25	NP-5
	36-40	Unweathered bedrock			---	---	---	---	---	---	---	---
Tipperary-------	0-3	Loamy fine sand	SM	A-2	0	0	90-100	90-100	50-85	20-40	---	NP
	3-60	Loamy fine sand, loamy sand, fine sand	SM, SP-SM	A-2, A-3	0	0	85-100	80-100	40-80	5-50	---	NP

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
62:												
Eghelm----------	0-3	Loamy fine sand	SC-SM, SM	A-2-4, A-4	0	0	100	100	70-85	30-50	20-25	NP-5
	3-52	Stratified loamy fine sand to loam	SC, SC-SM, SM	A-2-4, A-4	0	0	100	100	90-95	20-50	20-30	NP-10
	52-60	Stratified loam to silt loam	SC, SC-SM, SM	A-4	0	0	100	100	90-95	35-50	20-30	NP-10
63:												
Eghelm, moist---	0-6	Loamy sand	SC-SM, SM	A-2-4	0	0	100	100	50-75	15-30	20-25	NP-5
	6-60	Stratified loamy sand to loam	SC, SC-SM, SM	A-2-4, A-4	0	0	100	100	90-95	20-50	20-30	NP-10
64:												
Emlin-----------	0-11	Loam	CL, CL-ML	A-4	0	0-5	90-100	85-100	80-95	60-75	25-30	5-10
	11-19	Clay loam, loam	CL	A-6	0	0-5	95-100	90-100	85-100	60-80	30-40	10-20
	19-60	Silty clay loam, clay loam, loam	CL, CL-ML	A-4	0	0-10	80-100	75-100	75-100	60-90	25-35	5-10
65:												
Emlin-----------	0-7	Loam	CL, CL-ML	A-4	0	0-5	90-100	85-100	80-95	60-75	25-30	5-10
	7-30	Clay loam, loam	CL	A-6	0	0-5	95-100	90-100	85-100	60-80	30-40	10-20
	30-60	Clay loam, silty clay loam, loam	CL, CL-ML	A-4	0	0-10	80-100	75-100	75-100	60-90	25-35	5-10
Tymosling-------	0-1	Very gravelly clay loam	GC	A-6, A-2-6	5-10	0-5	60-70	40-50	35-45	30-40	30-40	10-20
	1-5	Gravelly clay loam	CL, GC, SC	A-6	0-10	10-15	60-80	55-75	50-70	40-60	30-40	10-20
	5-14	Clay, clay loam	CL	A-6, A-7	0-5	0-5	80-95	75-90	70-85	65-85	35-50	15-25
	14-35	Clay	CH, CL	A-7	0	0	90-100	90-100	85-95	75-85	40-60	15-35
	35-39	Weathered bedrock			---	---	---	---	---	---	---	---
66:												
Evanot----------	0-8	Loam	CL, CL-ML	A-4	0	0	100	100	85-95	60-75	25-30	5-10
	8-20	Clay loam	CL	A-6	0	0	100	100	90-100	70-80	30-35	10-15
	20-33	Clay loam	CL	A-6	0	0	100	100	90-100	70-80	30-35	10-15
	33-60	Loam	CL, CL-ML	A-4	0	0-20	85-100	80-100	70-95	50-75	25-30	5-10

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
67:												
Evanot----------	0-8	Loam	CL, CL-ML	A-4	0	0	100	100	85-95	60-75	25-30	5-10
	8-20	Clay loam	CL	A-6	0	0	100	100	90-100	70-80	30-35	10-15
	20-33	Clay loam	CL	A-6	0	0	100	100	90-100	70-80	30-35	10-15
	33-60	Loam	CL, CL-ML	A-4	0	0-20	85-100	80-100	70-95	50-75	25-30	5-10
68:												
Evanot----------	0-3	Loam	CL, CL-ML	A-4	0	0	100	100	85-95	60-75	25-30	5-10
	3-22	Clay loam	CL	A-6	0	0	100	100	90-100	70-80	30-35	10-15
	22-60	Loam	CL, CL-ML	A-4	0	0-20	85-100	80-100	70-95	50-75	25-30	5-10
Yamo----------	0-3	Loam	CL, CL-ML	A-4	0	0	95-100	95-100	90-95	65-75	15-25	5-10
	3-14	Loam, clay loam	CL, CL-ML	A-4, A-6	0	0	95-100	95-100	90-95	65-80	20-30	5-15
	14-60	Loam	CL, CL-ML	A-4	0	0	95-100	95-100	90-95	65-75	15-25	5-10
69:												
Fenster---------	0-2	Silt loam	ML	A-4	0	0	90-95	85-90	80-90	70-80	30-35	5-10
	2-11	Silty clay loam, silt loam	ML	A-4	0	0	95-100	95-100	85-95	80-90	30-35	5-10
	11-60	Silty clay loam, silt loam	ML	A-4	0	0	95-100	95-100	85-95	80-90	30-35	5-10
Thenipel--------	0-2	Silt loam	ML	A-4	0	0	95-100	90-100	90-95	80-90	30-35	5-10
	2-25	Silty clay loam, silt loam, loam	ML	A-4	0	0	90-100	85-100	85-95	70-90	30-35	5-10
	25-60	Silty clay loam, silt loam, loam	ML	A-4	0	0	80-95	75-85	70-85	60-85	30-35	5-10
70:												
Fluvaquents, frequently flooded--------	0-4	Sandy loam	SC, SC-SM	A-4	0	0-15	85-100	75-100	60-70	30-40	25-30	5-10
	4-60	Stratified sand to clay, sand, extremely gravelly sand	CL, CL-ML, GW-GM	A-1, A-2, A-4, A-6	0	0-50	40-100	30-100	15-90	5-80	20-40	NP-15

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
70: Haplaquolls, frequently flooded--------	0-6	Clay loam	CL	A-6	0	0	90-100	85-100	80-100	70-80	30-40	10-20
	6-14	Clay loam	CL	A-6	0	0	90-100	85-100	80-100	70-80	30-40	10-20
	14-21	Fine sandy loam	SM, SC-SM, ML, CL-ML	A-4	0	0	100	100	70-85	40-55	20-25	NP-5
	21-34	Sandy clay loam	SM, SC-SM, CL-ML, CL	A-4, A-6	0	0	100	100	80-90	35-55	25-35	5-15
	34-44	Sand	SM, SC-SM	A-2-4, A-3	0	0	100	100	50-70	5-15	20-25	NP-5
	44-60	Extremely gravelly sand	GP	A-1-a, A-1-b	0	0-30	15-30	10-25	5-15	0-5	20-25	NP-5
71: Flygare, dry----	0-1	Slightly decomposed plant material	PT		0	0	100	100	---	---	---	---
	1-22	Loam	CL-ML	A-4	0-10	0-10	85-95	85-95	75-85	50-75	25-30	5-10
	22-29	Very cobbly loam	GC-GM, SC-SM	A-2-4	0-15	30-70	45-90	40-85	35-80	25-65	25-30	5-10
	29-35	Very cobbly clay loam, extremely cobbly clay loam	GC	A-2-6, A-6	0-15	30-70	55-80	40-75	35-70	30-60	30-35	10-15
	35-60	Extremely cobbly clay loam	GC	A-2-6, A-6	0-15	30-70	30-65	25-50	20-45	15-40	30-35	10-15
72: Foidel, cool----	0-2	Slightly decomposed plant material	PT		0	0	100	100	---	---	---	---
	2-28	Loam	CL, CL-ML	A-4	0	0	100	100	85-95	60-70	25-30	5-10
	28-39	Clay loam, loam	CL	A-6	0	0	100	100	85-95	60-80	30-40	10-20
	39-60	Clay loam	CL	A-6	0	0	100	100	90-100	70-80	30-40	10-20
73: Foidel----------	0-2	Slightly decomposed plant material	PT		0	0	100	100	---	---	---	---
	2-28	Loam	CL, CL-ML	A-4	0	0	100	100	85-95	60-70	25-30	5-10
	28-39	Clay loam, loam	CL	A-6	0	0	100	100	85-95	60-80	30-40	10-20
	39-60	Clay loam	CL	A-6	0	0	100	100	90-100	70-80	30-40	10-20

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
74:												
Foidel, moist---	0-2	Slightly decomposed plant material	PT		0	0	100	100	---	---	---	---
	2-23	Loam	CL, CL-ML	A-4	0	0	100	100	85-95	60-70	25-30	5-10
	23-38	Loam, clay loam	CL	A-6	0	0	100	100	85-95	60-80	30-40	10-20
	38-60	Clay loam	CL	A-6	0	0	100	100	90-100	70-80	30-40	10-20
Flygare---------	0-1	Slightly decomposed plant material	PT		0	0	100	100	---	---	---	---
	1-22	Loam	CL-ML	A-4	0-10	0-10	85-95	85-95	75-85	50-75	25-30	5-10
	22-29	Very cobbly loam	GC-GM, SC-SM	A-2-4	0-15	30-70	45-90	40-85	35-80	25-65	25-30	5-10
	29-35	Very cobbly clay loam, extremely cobbly clay loam	GC	A-2-6, A-6	0-15	30-70	55-80	40-75	35-70	30-60	30-35	10-15
	35-60	Extremely cobbly clay loam	GC	A-2-6, A-6	0-15	30-70	30-65	25-50	20-45	15-40	30-35	10-15
Skyway, moist---	0-20	Fine sandy loam	CL, CL-ML, SC, SC-SM	A-2, A-4	0	0-10	90-100	80-100	60-85	30-55	25-30	5-10
	20-31	Gravelly sandy loam, sandy loam, fine sandy loam	SM	A-2, A-4	0	0-30	75-100	70-100	60-80	25-50	20-30	NP-5
	31-35	Unweathered bedrock			---	---	---	---	---	---	---	---

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
75:												
Fonce	0-3	Sandy loam	SC, SC-SM	A-2, A-4	0	0	95-100	95-100	60-70	30-40	25-30	5-10
	3-15	Sandy clay loam, sandy loam	SC-SM	A-4	0	0	90-100	90-100	75-90	35-45	25-30	5-10
	15-33	Very gravelly coarse sandy loam, gravelly sandy clay loam	GC-GM, SC-SM	A-2	0-5	0-10	50-70	40-55	30-40	10-20	25-35	5-10
	33-60	Gravelly sand, very gravelly loamy sand, gravelly coarse sand	SM, SP-SM	A-1	0-5	0-5	65-85	50-70	15-45	5-15	20-25	NP-5
76:												
Fonce	0-2	Gravelly sandy loam	SC-SM, SM	A-2	0-5	0-5	65-75	65-75	40-55	20-35	20-25	NP-5
	2-16	Gravelly sandy clay loam, sandy loam, sandy clay loam	CL-ML, SC-SM	A-4	0-5	0-5	65-100	60-100	50-75	35-60	25-30	5-10
	16-30	Very gravelly sandy loam, very cobbly sandy loam	GC-GM, GM	A-1	0-5	15-30	35-55	25-45	15-25	10-20	20-25	NP-5
	30-60	Very gravelly sandy loam, very gravelly loamy sand, very cobbly sandy loam	GC-GM, GM	A-1	0-5	15-30	35-55	25-45	10-25	5-20	20-25	NP-5
77:												
Forelle	0-5	Loam	CL, CL-ML	A-4	0-5	0-10	85-100	85-100	70-95	50-75	25-30	5-10
	5-23	Clay loam, loam, sandy clay loam	CL	A-4, A-6	0-5	0-10	85-100	85-100	70-100	50-80	25-40	5-20
	23-51	Loam, sandy clay loam, clay loam	CL, CL-ML	A-4, A-6	0-5	0-10	85-100	85-100	70-100	50-80	25-35	5-15
	51-60	Sandy loam	SM	A-2	0-5	0-10	85-100	80-100	50-70	25-40	20-25	NP-5

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
78:												
Forelle---------	0-5	Loam	CL, CL-ML	A-4	0-5	0-10	85-100	85-100	70-95	50-75	25-30	5-10
	5-23	Clay loam, loam, sandy clay loam	CL	A-4, A-6	0-5	0-10	85-100	85-100	70-100	50-80	25-40	5-20
	23-51	Loam, sandy clay loam, clay loam	CL, CL-ML	A-4, A-6	0-5	0-10	85-100	85-100	70-100	50-80	25-35	5-15
	51-60	Sandy loam	SM	A-2	0-5	0-10	85-100	80-100	50-70	25-40	20-25	NP-5
79:												
Forelle---------	0-5	Loam	CL, CL-ML	A-4	0-5	0-10	85-100	85-100	70-95	50-75	25-30	5-10
	5-23	Clay loam, loam, sandy clay loam	CL	A-4, A-6	0-5	0-10	85-100	85-100	70-100	50-80	25-40	5-20
	23-51	Loam, sandy clay loam, clay loam	CL, CL-ML	A-4, A-6	0-5	0-10	85-100	85-100	70-100	50-80	25-35	5-15
	51-60	Sandy loam	SM	A-2	0-5	0-10	85-100	80-100	50-70	25-40	20-25	NP-5
Evanot----------	0-8	Loam	CL, CL-ML	A-4	0	0	100	100	85-95	60-75	25-30	5-10
	8-20	Clay loam	CL	A-6	0	0	100	100	90-100	70-80	30-35	10-15
	20-33	Clay loam	CL	A-6	0	0	100	100	90-100	70-80	30-35	10-15
	33-60	Loam	CL, CL-ML	A-4	0	0-20	85-100	80-100	70-95	50-75	25-30	5-10
80:												
Forelle---------	0-5	Loam	CL, CL-ML	A-4	0-5	0-10	85-100	85-100	70-95	50-75	25-30	5-10
	5-23	Clay loam, loam, sandy clay loam	CL	A-4, A-6	0-5	0-10	85-100	85-100	70-100	50-80	25-40	5-20
	23-51	Loam, sandy clay loam, clay loam	CL, CL-ML	A-4, A-6	0-5	0-10	85-100	85-100	70-100	50-80	25-35	5-15
	51-60	Sandy loam	SM	A-2	0-5	0-10	85-100	80-100	50-70	25-40	20-25	NP-5
Evanot----------	0-8	Loam	CL, CL-ML	A-4	0	0	100	100	85-95	60-75	25-30	5-10
	8-20	Clay loam	CL	A-6	0	0	100	100	90-100	70-80	30-35	10-15
	20-33	Clay loam	CL	A-6	0	0	100	100	90-100	70-80	30-35	10-15
	33-60	Loam	CL, CL-ML	A-4	0	0-20	85-100	80-100	70-95	50-75	25-30	5-10

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
81:												
Forelle---------	0-6	Loam	CL, CL-ML	A-4	0-5	0-10	85-100	85-100	70-95	50-75	25-30	5-10
	6-30	Clay loam, loam, sandy clay loam	CL	A-4, A-6	0-5	0-10	85-100	85-100	70-100	50-80	25-40	5-20
	30-60	Sandy clay loam, loam, clay loam	CL, CL-ML	A-4, A-6	0-5	0-10	85-100	85-100	70-100	50-80	25-35	5-15
Obadia----------	0-1	Sandy loam	SC, SC-SM	A-2-4, A-4	0	0	90-100	80-100	60-90	30-50	25-30	5-10
	1-13	Clay, clay loam	CL	A-6, A-7	0	0	95-100	95-100	90-100	70-95	35-50	15-25
	13-42	Clay loam, clay	CL	A-6, A-7	0	0	95-100	95-100	90-100	70-95	35-50	15-25
	42-60	Sandy clay loam, clay loam	CL	A-6	0	0	95-100	95-100	80-95	50-80	30-40	10-20
82:												
Forelle---------	0-5	Loam	CL, CL-ML	A-4	0-5	0-10	85-100	85-100	70-95	50-75	25-30	5-10
	5-19	Clay loam, loam, sandy clay loam	CL	A-4, A-6	0-5	0-10	85-100	85-100	70-100	50-80	25-40	5-20
	19-60	Loam, sandy clay loam, clay loam	CL, CL-ML	A-4, A-6	0-5	0-10	85-100	85-100	70-100	50-80	25-35	5-15
Pinelli---------	0-3	Loam	CL-ML	A-4	0	0	100	95-100	85-95	60-70	25-30	5-10
	3-19	Clay, clay loam, sandy clay	CL	A-6, A-7	0	0	100	95-100	85-95	75-90	35-45	15-20
	19-60	Clay loam, sandy clay loam	CL, SC	A-6	0	0	100	95-100	80-95	45-80	30-40	10-20
Maysprings------	0-2	Loamy coarse sand	SM	A-1-b, A-2-4	0	0	90-100	80-95	40-60	15-30	---	NP
	2-14	Sandy clay loam, sandy loam	SC, SC-SM	A-2, A-4	0	0	95-100	85-100	50-75	25-50	25-35	5-10
	14-20	Coarse sandy loam	SM	A-2-4, A-4	0	0	90-100	85-95	50-60	30-40	20-25	NP-5
	20-60	Coarse sand, loamy coarse sand, gravelly coarse sand	SM, SP-SM	A-1	0	0	80-100	75-90	20-50	5-20	---	NP

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
83:												
Forsey----------	0-8	Cobbly sandy loam	SC, SC-SM	A-2-4	5-10	15-30	75-90	70-85	45-60	25-35	25-30	5-10
	8-24	Very cobbly sandy clay loam, very cobbly sandy loam	GC, GC-GM, SC, SC-SM	A-1-b, A-2	10-15	20-45	45-90	40-85	30-70	15-45	25-30	5-10
	24-60	Very cobbly sandy loam	SC, SC-SM, GC, GC-GM	A-1-b, A-2-4	10-15	45-70	45-90	40-85	25-60	15-35	25-30	5-10
Libeg-----------	0-5	Loam	CL-ML	A-4	0	0	80-95	80-90	65-85	45-55	25-30	5-10
	5-12	Gravelly loam	GC-GM, SC-SM	A-4	0-10	0-15	60-80	55-75	50-70	35-55	25-30	5-10
	12-35	Very gravelly sandy clay loam, very cobbly sandy clay loam, gravelly loam	GC, SC	A-2	0-10	15-35	45-70	40-65	30-55	20-45	25-30	5-10
	35-60	Extremely cobbly sandy loam, extremely cobbly sandy clay loam	GC-GM, GP-GC	A-1, A-2	0-10	40-60	20-60	15-40	10-30	5-20	25-30	5-10
84:												
Gebson, moist---	0-2	Very bouldery sandy loam	GC, GC-GM, SC, SC-SM	A-1, A-2	30-50	10-25	45-90	40-85	25-60	15-35	20-30	NP-10
	2-7	Very bouldery sandy clay loam	GC, GC-GM	A-1	10-25	10-25	55-70	45-65	35-60	20-45	25-30	5-10
	7-13	Gravelly sandy clay loam	SC, SC-SM	A-2, A-4	0-10	10-15	75-85	70-80	60-70	30-40	25-30	5-10
	13-24	Sandy clay loam, gravelly sandy clay loam	SC, SC-SM	A-2, A-4	0	0-10	80-100	75-95	60-70	20-50	25-30	5-10
	24-60	Gravelly sandy clay loam, sandy clay loam, sandy loam	SC, SC-SM	A-2, A-4	0	0-10	80-100	75-95	60-70	25-40	20-30	5-10

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
84:												
Youga	0-10	Fine sandy loam	SC, SC-SM	A-4	0	0	100	95-100	85-95	40-50	20-25	5-10
	10-16	Sandy clay loam	CL, CL-ML, SC, SC-SM	A-4	0	0	85-100	75-100	70-90	45-60	25-35	5-10
	16-50	Sandy clay loam, fine sandy loam	CL, CL-ML, SC, SC-SM	A-4	0	0	85-100	75-100	70-95	40-55	20-30	5-10
	50-60	Fine sandy loam	SC, SC-SM	A-4	0	0	85-100	75-100	70-90	35-45	20-25	5-10
85:												
Giarch	0-2	Fine sandy loam	SC, SC-SM	A-2-4, A-4	0	0	100	100	85-95	30-40	20-30	5-10
	2-18	Clay loam, clay	CL	A-6, A-7	0	0	100	100	90-100	85-95	35-45	15-25
	18-58	Sandy clay loam, clay loam, loam	CL	A-6	0	0	100	100	85-95	55-80	25-35	10-20
	58-60	Sand	SM, SP-SM	A-2-4, A-3	0	0	100	100	50-80	5-15	---	NP
86:												
Gracot	0-5	Very gravelly loamy sand	GM	A-1	0	5-30	40-60	35-45	30-35	5-15	15-25	NP-5
	5-16	Extremely gravelly loamy sand, very gravelly loamy sand, extremely gravelly sand	GM, GP-GM	A-1	0	5-30	20-60	15-45	10-35	5-15	15-25	NP-5
	16-60	Fine sand, sand	SM, SP-SM	A-2	0	0	100	100	70-90	10-20	---	NP
Maybell	0-3	Sand	SM	A-2	0	0	100	100	60-70	5-15	---	NP
	3-15	Sand, loamy sand, loamy fine sand	SM	A-2	0	0	100	100	50-85	10-40	---	NP
	15-60	Sand, loamy sand, loamy fine sand	SM, SP-SM	A-2, A-3	0	0	100	100	55-85	5-30	---	NP

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
87:												
Gretdivid-------	0-3	Loamy coarse sand	SM	A-1, A-2	0	0	95-100	85-95	45-70	15-25	20-25	NP-5
	3-7	Sandy clay loam, sandy loam	CL, SC, SC-SM	A-4	0	0	95-100	90-100	60-90	35-55	25-30	5-10
	7-60	Coarse sand, gravelly coarse sand, loamy coarse sand	SM, SP-SM	A-1	0	0	60-100	55-90	20-40	5-15	---	NP
Taffom----------	0-6	Sandy loam	SC, SC-SM	A-2-4	0	0	100	90-100	60-70	25-35	25-30	5-10
	6-43	Sandy clay loam	CL, CL-ML, SC	A-4	0	0	100	85-100	80-90	35-55	25-30	5-10
	43-60	Sandy loam, loam, loamy sand	SC-SM, SM	A-2-4, A-4	0	0	100	80-100	40-55	15-50	15-25	NP-5
Abor----------	0-6	Clay	CL	A-7	0	0	100	100	95-100	80-95	40-50	20-25
	6-31	Clay, silty clay	CH	A-7	0	0	100	100	95-100	85-95	50-65	30-40
	31-35	Weathered bedrock			---	---	---	---	---	---	---	---
88:												
Grieves---------	0-2	Loamy fine sand	SM	A-2, A-4	0	0	90-100	90-100	70-90	30-50	20-25	NP-5
	2-30	Fine sandy loam, loamy fine sand	SC-SM, SM	A-2, A-4	0	0	90-100	90-100	75-95	25-50	15-25	NP-5
	30-60	Fine sandy loam, sandy loam	SC, SC-SM	A-2, A-4	0	0	90-100	85-100	60-85	30-50	15-25	NP-10
89:												
Grieves---------	0-2	Loamy fine sand	SM	A-2, A-4	0	0	90-100	90-100	70-90	30-50	20-25	NP-5
	2-30	Fine sandy loam, loamy fine sand	SC-SM, SM	A-2, A-4	0	0	90-100	90-100	75-95	25-50	15-25	NP-5
	30-60	Fine sandy loam, sandy loam	SC, SC-SM	A-2, A-4	0	0	90-100	85-100	60-85	30-50	15-25	NP-10

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
90:												
Grieves---------	0-2	Loamy fine sand	SM	A-2, A-4	0	0	90-100	90-100	70-90	30-50	20-25	NP-5
	2-30	Fine sandy loam, loamy fine sand	SC-SM, SM	A-2, A-4	0	0	90-100	90-100	75-95	25-50	15-25	NP-5
	30-60	Fine sandy loam, sandy loam	SC, SC-SM	A-2, A-4	0	0	90-100	85-100	60-85	30-50	15-25	NP-10
Crestman--------	0-2	Loamy sand	SM	A-2	0	0	85-95	80-90	40-75	20-30	20-25	NP-5
	2-14	Gravelly loamy sand, fine sand	SM	A-2	0	0	70-80	65-75	30-65	10-25	20-25	NP-5
	14-18	Weathered bedrock			---	---	---	---	---	---	---	---
91:												
Grieves---------	0-2	Loamy fine sand	SM	A-2	0	0	90-100	90-100	60-80	15-30	20-25	NP-5
	2-60	Fine sandy loam, sandy loam	SC, SC-SM	A-2, A-4	0	0	90-100	85-100	60-85	30-50	15-25	NP-10
Yamo------------	0-5	Clay loam	CL	A-6	0	0	95-100	95-100	85-95	70-85	20-30	10-15
	5-60	Sandy clay loam, clay loam, loam	CL, CL-ML	A-4	0	0	95-100	95-100	80-95	55-80	20-30	5-10
Crestman--------	0-2	Loamy sand	SM	A-2	0	0	85-95	80-90	40-75	20-30	20-25	NP-5
	2-14	Gravelly loamy sand, fine sand	SM	A-2	0	0	70-80	65-75	30-65	10-25	20-25	NP-5
	14-18	Weathered bedrock			---	---	---	---	---	---	---	---

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
92:												
Grimm----------	0-4	Extremely cobbly loamy sand	GC, GC-GM, GP-GC	A-1, A-2	0-10	30-50	20-80	15-55	10-55	10-20	25-30	5-10
	4-13	Very cobbly loamy sand, extremely cobbly loamy sand	GP-GC, SC, SC-SM	A-1, A-2	0-10	35-50	55-70	40-60	25-40	10-25	25-30	5-10
	13-18	Sandy loam, loamy sand, sand	SC-SM, SP-SM, SW-SM	A-4, A-2, A-3	0	0	100	100	50-70	5-40	20-25	NP-5
	18-60	Extremely cobbly sand, very cobbly sand, sand	SP-SM	A-1	0-10	35-60	55-70	40-60	25-40	5-15	20-25	NP-5
Ustic Torriorthents, shallow--------	0-7	Very cobbly sandy loam	GC, GC-GM, SC, SC-SM	A-1, A-2-4	0-5	30-55	55-75	40-60	25-50	15-35	25-30	5-10
	7-18	Sandy loam, clay	CL, CL-ML, SC, SC-SM	A-2-4, A-4, A-6, A-7	0	0-15	85-95	80-95	55-90	30-90	25-45	5-20
	18-22	Weathered bedrock			---	---	---	---	---	---	---	---
93:												
Gullied land----	0-60	Variable			0	0	---	---	---	---	0-14	---
94:												
Hapney, moist---	0-2	Fine sandy loam	SC, SC-SM	A-4	0	0	95-100	95-100	80-90	40-50	25-30	5-10
	2-15	Clay, clay loam	CL	A-6, A-7	0	0	95-100	95-100	85-95	75-90	35-45	15-25
	15-50	Clay loam, silty clay loam	CL	A-6	0	0	95-100	95-100	85-95	65-90	30-40	10-20
	50-60	Sandy clay loam, clay loam	CL	A-6	0	0	95-100	95-100	80-90	50-80	30-40	10-20
95:												
Haterton--------	0-2	Loam	CL, CL-ML	A-4	0	0	85-100	75-100	70-95	50-75	25-30	5-10
	2-16	Channery loam, loam	CL-ML, GC-GM, SC-SM	A-2-4, A-4	0	0	60-90	50-85	45-80	30-60	25-30	5-10
	16-20	Weathered bedrock			---	---	---	---	---	---	---	---

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
95:												
Piezon----------	0-2	Loam	CL, CL-ML	A-4	0	0	100	100	95-100	60-75	25-35	5-10
	2-13	Loam	CL, CL-ML	A-4	0	0	95-100	95-100	95-100	65-75	25-35	5-10
	13-23	Channery loam	CL, CL-ML	A-4	0	0	75-85	55-75	50-75	50-60	25-35	5-10
	23-27	Weathered bedrock			---	---	---	---	---	---	---	---
96:												
Heathcoat-------	0-13	Stony loam	CL, CL-ML	A-4	10-25	10-20	75-95	70-90	60-80	45-75	25-30	5-10
	13-29	Clay loam, clay	CL	A-6, A-7	0-5	0-5	95-100	90-100	85-95	70-90	35-45	15-20
	29-60	Sandy clay loam, clay loam	CL	A-4	0-5	0-5	90-100	80-100	70-85	35-75	25-30	5-10
97:												
Heathcoat-------	0-6	Loam	CL, CL-ML	A-4	0	0	95-100	95-100	85-95	70-80	25-30	5-10
	6-22	Clay loam, clay	CL	A-6, A-7	0-5	0-5	95-100	90-100	85-95	70-90	35-45	15-20
	22-60	Clay loam, clay	CL	A-6, A-7	0-5	0-5	95-100	90-100	85-95	70-90	35-45	15-20
Clayburn--------	0-15	Loam	CL-ML	A-4	0	0	95-100	90-100	80-90	60-70	25-30	5-10
	15-44	Clay loam, sandy clay loam, gravelly sandy clay loam	CL, SC	A-6	0	0	90-100	80-100	70-95	45-85	25-35	10-20
	44-60	Gravelly loam, sandy clay loam, loam	CL, SC	A-6	0	0	90-100	80-100	65-90	45-80	30-35	10-15
98:												
Herm------------	0-10	Bouldery clay loam	CL	A-6	15-25	0-15	90-95	85-90	70-80	55-65	30-35	10-15
	10-18	Stony clay	CL	A-7	10-45	0-30	75-90	70-85	60-85	55-80	40-50	20-30
	18-45	Clay	CH, CL	A-7	0-5	0-5	95-100	90-100	80-95	75-90	40-55	25-35
	45-60	Clay	CH, CL	A-7	0-5	0-5	95-100	90-100	80-95	75-90	40-55	25-35
Fughes----------	0-19	Bouldery loam	CL, CL-ML	A-4	20-35	0-20	90-95	85-90	80-85	60-65	25-30	5-10
	19-46	Clay	CH	A-7	0-5	5-20	90-95	90-95	80-90	70-80	50-60	30-35
	46-60	Clay	CH	A-7	0-5	5-20	90-95	90-95	80-90	70-80	50-60	30-35

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
99:												
Hesperus, dry---	0-5	Fine sandy loam	CL, CL-ML, SC, SC-SM	A-4	0	0	95-100	90-100	85-95	40-60	20-30	5-10
	5-20	Loam, clay loam, sandy clay loam	CL	A-6	0	0	95-100	90-100	90-95	65-80	30-35	10-15
	20-52	Clay loam, sandy clay loam	CL	A-6	0	0	95-100	90-100	90-95	70-85	30-40	10-20
	52-60	Clay loam, sandy clay loam, loam	CL	A-6	0	0	95-100	90-100	85-95	60-80	25-35	10-15
100:												
Hesperus--------	0-12	Loam	CL, CL-ML	A-4	0	0	95-100	90-100	90-95	65-75	20-30	5-10
	12-45	Clay loam, sandy clay loam	CL	A-6	0	0	95-100	90-100	90-95	70-85	30-40	10-20
	45-60	Clay loam, sandy clay loam, loam	CL	A-6	0	0	95-100	90-100	85-95	60-80	25-35	10-15
101:												
Hesperus--------	0-12	Loam	CL, CL-ML	A-4	0	0	95-100	90-100	90-95	65-75	20-30	5-10
	12-45	Clay loam, sandy clay loam	CL	A-6	0	0	95-100	90-100	90-95	70-85	30-40	10-20
	45-60	Clay loam, sandy clay loam, loam	CL	A-6	0	0	95-100	90-100	85-95	60-80	25-35	10-15

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
102:												
Holter----------	0-10	Very stony fine sandy loam	SC, SC-SM	A-2-4	20-30	0-20	80-90	70-80	60-70	20-30	20-25	5-10
	10-23	Extremely cobbly clay loam, extremely cobbly sandy clay loam, very cobbly clay loam	GC, SC	A-2-6, A-6	15-25	5-35	50-80	40-70	35-70	20-50	30-40	10-15
	23-60	Extremely cobbly loam, extremely cobbly sandy clay loam	GC-GM, SC-SM, SM	A-2-4	15-30	15-40	50-65	35-55	30-50	20-30	25-35	5-10
Detra----------	0-15	Loam	CL, CL-ML	A-4	0	0	90-100	85-100	80-95	55-60	25-35	5-10
	15-36	Clay loam	CL	A-6	0	0	85-100	80-100	80-95	60-75	30-40	10-20
	36-60	Very cobbly sandy clay loam, very gravelly sandy clay loam	GC, GP-GC, GW-GC	A-2	0	0-35	35-55	30-55	25-45	10-30	30-35	10-15
103:												
Iles----------	0-5	Loam	CL, CL-ML	A-4	0	0	90-100	85-100	75-95	65-85	20-30	5-10
	5-25	Silty clay loam, clay loam, silty clay	CH, CL	A-7	0	0	95-100	90-100	85-100	70-95	35-55	15-30
	25-36	Clay loam, silty clay loam	CL	A-6	0	0	95-100	90-100	75-100	65-90	30-40	10-20
	36-60	Silt loam, loam	CL	A-4	0	0	90-100	85-100	70-95	65-85	25-30	5-10
104:												
Ironco----------	0-10	Very bouldery loam	SC, SC-SM	A-4	25-50	15-25	45-90	40-85	35-80	25-65	25-30	5-10
	10-60	Very stony clay loam, very stony sandy clay loam	GC, SC	A-2-6, A-6	25-50	15-25	45-90	40-85	30-85	15-70	30-35	10-15

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
104:												
Mulgon, dry-----	0-1	Slightly decomposed plant material	PT		0	0	100	100	---	---	---	---
	1-16	Very stony sandy loam	SC, SC-SM	A-1-b, A-2-4	30-40	10-30	65-75	50-60	40-50	20-30	25-30	5-10
	16-32	Very stony sandy clay loam, very stony clay loam	GC, SC	A-2-6, A-6	25-35	15-35	65-75	50-65	45-55	30-40	30-35	10-15
	32-60	Very stony sandy clay loam	GC, SC	A-2-6, A-6	25-35	15-35	65-75	50-65	45-55	30-40	30-35	10-15
105:												
Ironsprings-----	0-14	Loamy sand	SM	A-2	0	0	100	100	65-75	30-35	---	NP
	14-40	Sandy loam, coarse sandy loam	SC, SC-SM, SM	A-2, A-4	0	0	90-100	85-100	50-70	25-40	20-30	NP-10
	40-60	Loamy sand, loamy coarse sand, coarse sand	SM, SP-SM	A-2	0	0	90-100	85-100	50-60	10-25	---	NP
106:												
Ironsprings-----	0-10	Loamy sand	SM	A-2	0	0	100	100	65-75	30-35	---	NP
	10-36	Sandy loam, coarse sandy loam	SC, SC-SM, SM	A-2, A-4	0	0	90-100	85-100	50-70	25-40	20-30	NP-10
	36-60	Loamy sand, loamy coarse sand, coarse sand	SM, SP-SM	A-2	0	0	90-100	85-100	50-60	10-25	---	NP
107:												
Ironsprings-----	0-14	Loamy coarse sand	SM	A-2	0	0	90-100	85-90	50-55	15-20	---	NP
	14-40	Coarse sandy loam, sandy loam	SC, SC-SM, SM	A-2, A-4	0	0	90-100	85-100	50-70	25-40	20-30	NP-10
	40-60	Loamy coarse sand, loamy sand, coarse sand	SM, SP-SM	A-2	0	0	90-100	85-100	50-60	10-25	---	NP

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
107:												
Maysprings------	0-3	Loamy coarse sand	SM	A-1-b, A-2-4	0	0	90-100	80-95	40-60	15-30	---	NP
	3-26	Sandy clay loam, sandy loam	SC, SC-SM	A-2, A-4	0	0	95-100	85-100	50-75	25-50	25-35	5-10
	26-36	Coarse sandy loam	SM	A-2-4, A-4	0	0	90-100	85-95	50-60	30-40	20-25	NP-5
	36-60	Coarse sand, loamy coarse sand, gravelly coarse sand	SM, SP-SM	A-1	0	0	80-100	75-90	20-50	5-20	---	NP
Gretdivid-------	0-3	Loamy coarse sand	SM	A-1, A-2	0	0	95-100	85-95	45-70	15-25	20-25	NP-5
	3-7	Sandy clay loam, sandy loam	CL, SC, SC-SM	A-4	0	0	95-100	90-100	60-90	35-55	25-30	5-10
	7-60	Coarse sand, gravelly coarse sand, loamy coarse sand	SM, SP-SM	A-1	0	0	60-100	55-90	20-40	5-15	---	NP
108:												
Jerry-----------	0-2	Slightly decomposed plant material	PT		0	0	100	100	---	---	---	---
	2-12	Loam	CL	A-6	0	0	100	100	90-95	65-75	30-35	10-15
	12-23	Clay loam	CL	A-6	0	0	100	100	95-100	70-80	30-40	10-20
	23-29	Silty clay, silty clay loam, clay	CL	A-7	0-5	0-10	100	100	95-100	85-95	40-50	15-25
	29-60	Silty clay loam, silty clay, clay	CL	A-7	0-5	0-10	100	100	95-100	85-95	40-50	15-25
Cochetopa-------	0-19	Loam	CL, CL-ML	A-4	0	0	95-100	95-100	95-100	70-80	25-30	5-10
	19-48	Clay loam, clay	CH, CL	A-7	0-5	0-10	95-100	95-100	90-100	75-90	40-55	20-30
	48-60	Clay loam, clay	CL	A-7	0-5	0-10	95-100	90-100	90-100	75-90	40-50	20-30

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
109:												
Joebas----------	0-7	Gravelly sandy loam	SC, SC-SM	A-2	0-10	0-10	65-85	60-80	35-50	20-30	25-30	5-10
	7-13	Gravelly sandy clay loam	GC, SC, SC-SM	A-2, A-4	0-10	0-10	65-85	60-75	45-70	20-40	25-30	5-10
	13-16	Gravelly sandy clay loam, cobbly sandy loam	GC, GC-GM, SC, SC-SM	A-2, A-4	0-10	0-15	65-85	60-80	50-60	30-40	20-30	5-10
	16-20	Unweathered bedrock			---	---	---	---	---	---	---	---
Rock outcrop----	0-60	Unweathered bedrock			---	---	---	---	---	---	0-14	---
110:												
Kemmerer--------	0-3	Silty clay loam	ML	A-7	0	0	95-100	95-100	95-100	85-95	40-45	10-15
	3-22	Clay, silty clay	CL	A-7	0	0	95-100	95-100	95-100	85-95	40-50	15-25
	22-26	Weathered bedrock			---	---	---	---	---	---	---	---
111:												
Kemmerer--------	0-8	Very gravelly clay loam	GC	A-6	0	5-20	35-55	30-50	30-50	20-40	30-35	10-15
	8-27	Clay, silty clay	CL	A-7	0	0	95-100	95-100	95-100	85-95	40-50	15-25
	27-31	Weathered bedrock			---	---	---	---	---	---	---	---
Grapit----------	0-3	Very cobbly sandy loam	GC-GM	A-2	5-15	20-45	45-70	35-65	20-50	10-30	25-30	5-10
	3-35	Very gravelly clay loam, very channery clay loam, very channery loam	GC, GC-GM	A-2, A-4	5-15	10-25	30-55	30-50	25-50	20-40	25-30	5-10
	35-60	Extremely gravelly sandy clay loam, extremely channery loam, very channery clay loam	GC, GC-GM	A-1, A-2	5-15	10-25	30-55	20-50	15-45	10-35	20-30	NP-10

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
112:												
Kemmerer--------	0-3	Silty clay loam	ML	A-7	0	0	95-100	95-100	95-100	85-95	40-45	10-15
	3-22	Clay, silty clay	CL	A-7	0	0	95-100	95-100	95-100	85-95	40-50	15-25
	22-26	Weathered bedrock			---	---	---	---	---	---	---	---
Moyerson--------	0-1	Silty clay loam	ML	A-7	0	0	95-100	95-100	95-100	85-95	40-50	10-20
	1-17	Silty clay, clay	CH, CL	A-7	0	0-15	90-100	90-100	85-100	75-95	45-55	20-30
	17-21	Weathered bedrock			---	---	---	---	---	---	---	---
113:												
Kemmerer--------	0-3	Silty clay loam	ML	A-7	0	0	95-100	95-100	95-100	85-95	40-45	10-15
	3-22	Clay, silty clay	CL	A-7	0	0	95-100	95-100	95-100	85-95	40-50	15-25
	22-26	Weathered bedrock			---	---	---	---	---	---	---	---
Yamo------------	0-5	Loam	CL, CL-ML	A-4	0	0	95-100	95-100	90-95	65-75	15-25	5-10
	5-15	Loam, clay loam	CL, CL-ML	A-4, A-6	0	0	95-100	95-100	90-95	65-80	20-30	5-15
	15-38	Loam, clay loam, sandy clay loam	CL, CL-ML	A-4	0	0	95-100	95-100	80-95	55-80	20-30	5-10
	38-60	Loam	CL, CL-ML	A-4	0	0	95-100	95-100	90-95	65-75	15-25	5-10
114:												
Lamphier--------	0-2	Moderately decomposed plant material	PT		0	0	100	100	---	---	---	---
	2-24	Fine sandy loam	SC, SC-SM	A-4	0	0	80-100	75-100	65-85	35-45	25-30	5-10
	24-60	Sandy clay loam, loam	CL, CL-ML, SC, SC-SM	A-4	0	0	80-100	75-100	70-90	45-70	25-35	5-10
115:												
Lamphier--------	0-2	Moderately decomposed plant material	PT		0	0	100	100	---	---	---	---
	2-24	Fine sandy loam	SC, SC-SM	A-4	0	0	80-100	75-100	65-85	35-45	25-30	5-10
	24-60	Sandy clay loam, loam	CL-ML, SC, SC-SM, CL	A-4	0	0	80-100	75-100	70-90	45-70	25-35	5-10

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
116:												
Lamphier--------	0-2	Moderately decomposed plant material	PT		0	0	100	100	---	---	---	---
	2-24	Fine sandy loam	SC, SC-SM	A-4	0	0	80-100	75-100	65-85	35-45	25-30	5-10
	24-60	Sandy clay loam, loam	CL, CL-ML, SC, SC-SM	A-4	0	0	80-100	75-100	70-90	45-70	25-35	5-10
Jerry-----------	0-10	Loam	CL	A-6	0	0	100	100	90-95	65-75	30-35	10-15
	10-21	Clay loam	CL	A-6	0	0	100	100	95-100	70-80	30-40	10-20
	21-27	Silty clay, silty clay loam, clay	CL	A-7	0-5	0-10	100	100	95-100	85-95	40-50	15-25
	27-60	Silty clay loam, silty clay, clay	CL	A-7	0-5	0-10	100	100	95-100	85-95	40-50	15-25
117:												
Lamphier--------	0-2	Moderately decomposed plant material	PT		0	0	100	100	---	---	---	---
	2-24	Fine sandy loam	SC, SC-SM	A-4	0	0	80-100	75-100	65-85	35-45	25-30	5-10
	24-60	Sandy clay loam, loam	CL, CL-ML, SC, SC-SM	A-4	0	0	80-100	75-100	70-90	45-70	25-35	5-10
Jerry-----------	0-10	Loam	CL	A-6	0	0	100	100	90-95	65-75	30-35	10-15
	10-21	Clay loam	CL	A-6	0	0	100	100	95-100	70-80	30-40	10-20
	21-27	Silty clay, silty clay loam, clay	CL	A-7	0-5	0-10	100	100	95-100	85-95	40-50	15-25
	27-60	Silty clay loam, silty clay, clay	CL	A-7	0-5	0-10	100	100	95-100	85-95	40-50	15-25
118:												
Lander----------	0-10	Loam	CL, CL-ML	A-4	0	0	100	100	90-95	65-75	25-30	5-10
	10-44	Stratified fine sandy loam to clay loam	CL, CL-ML	A-4, A-6	0	0	100	100	90-95	60-80	25-35	5-15
	44-55	Fine sand	SM	A-2-4	0	0	95-100	95-100	70-80	20-35	---	NP
	55-60	Extremely gravelly sand	GP	A-1	0	10-35	15-30	10-25	5-15	0-5	---	NP

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
119:												
Langspring------	0-3	Sandy loam	CL-ML, ML, SC-SM, SM	A-2, A-4	0	0	95-100	85-100	60-85	30-55	20-25	NP-5
	3-17	Sandy clay loam, loam, sandy loam	CL	A-6	0	0	80-100	75-100	65-85	50-75	25-30	10-15
	17-60	Sandy clay loam, loam, sandy loam, fine sandy loam	CL	A-6	0	0	85-100	80-100	70-85	50-70	25-30	10-15
120:												
Layoint---------	0-14	Loamy fine sand	SM	A-2	0	0	100	100	70-85	30-50	---	NP
	14-32	Loamy fine sand, loamy very fine sand	SM	A-2	0	0	90-100	85-100	70-100	30-60	---	NP
	32-36	Unweathered bedrock			---	---	---	---	---	---	---	---
Moosed----------	0-7	Loamy fine sand	SM	A-2, A-4	0	0	95-100	95-100	55-85	15-45	20-25	NP-5
	7-15	Loamy fine sand, loamy sand	SM	A-2	0	0	95-100	95-100	50-85	15-35	20-25	NP-5
	15-18	Channery sand, channery loamy sand, loamy sand	SM	A-1, A-2	0	0-15	65-95	60-95	45-75	10-35	20-25	NP-5
	18-22	Unweathered bedrock			---	---	---	---	---	---	---	---
Berlake---------	0-8	Fine sandy loam	SC-SM	A-4	0	0	100	100	95-100	40-50	20-25	5-10
	8-42	Sandy clay loam	CL-ML, SC, SC-SM	A-4	0	0	100	95-100	80-100	45-60	25-30	5-10
	42-60	Sandy clay loam, sandy loam	CL-ML, SC-SM	A-4	0	0	100	95-100	65-80	35-60	20-30	5-10
121:												
Leaps-----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	---	---	---	---
	1-15	Clay loam	CL	A-6	0-5	0-10	95-100	90-100	80-95	65-75	25-35	10-15
	15-39	Clay, clay loam	CH, CL	A-7	0-5	0-15	95-100	90-100	80-95	70-85	40-60	15-35
	39-60	Clay, clay loam	CH, CL	A-7	0-5	0-15	95-100	90-100	80-95	70-85	40-60	15-35

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
122:												
Leswill---------	0-5	Clay loam	CL	A-6	0	0	100	100	90-95	70-80	30-35	10-15
	5-14	Clay loam, silty clay loam	CL	A-6	0	0	100	100	90-100	70-95	30-35	10-15
	14-41	Silty clay loam, clay loam	CL	A-6	0	0	100	100	90-100	70-95	30-35	10-15
	41-75	Silty clay loam, clay loam	CL	A-6	0	0	95-100	95-100	90-95	70-80	30-35	10-15
Rogrube---------	0-3	Loam	CL-ML	A-4	0	0	100	100	80-90	60-80	20-25	5-10
	3-28	Clay loam, silty clay loam	CL	A-6	0	0	100	100	85-100	70-80	30-35	10-15
	28-60	Sandy clay loam, clay loam, silty clay loam	CL, CL-ML	A-4, A-6	0	0	100	90-100	80-100	55-80	25-35	5-15
123:												
Lilsnake--------	0-4	Loam	CL, CL-ML	A-4	0	0	85-100	80-100	60-80	60-70	25-30	5-10
	4-15	Loam	CL, CL-ML	A-4, A-6	0	0	85-100	80-100	60-80	60-70	25-35	5-15
	15-19	Gravelly clay loam, gravelly loam, loam	CL, CL-ML, SC, SC-SM	A-2, A-4, A-6	0	0-10	85-90	50-85	30-70	25-60	25-35	5-15
	19-23	Unweathered bedrock			---	---	---	---	---	---	---	---
Sandwash--------	0-4	Loam	CL, CL-ML	A-4	0	0	95-100	90-100	85-95	60-75	25-30	5-10
	4-16	Loam, clay loam, channery loam	CL, CL-ML, ML	A-4	0	0-10	60-100	55-90	50-90	40-70	20-30	NP-10
	16-35	Very channery loam, extremely cobbly clay loam, extremely cobbly loam	CL, CL-ML, SC, SC-SM	A-2, A-4	0-15	55-75	60-85	55-75	50-70	20-60	25-30	5-10
	35-39	Unweathered bedrock			---	---	---	---	---	---	---	---

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
124:												
Losee----------	0-5	Very cobbly sandy loam	GC-GM, GM, SC-SM, SM	A-1-b, A-2	15-20	20-30	45-90	40-85	25-60	15-35	20-25	NP-5
	5-24	Very cobbly sandy clay loam	GC, SC	A-4, A-2	15-20	20-30	45-90	40-85	30-75	15-45	25-30	5-10
	24-40	Very cobbly sandy clay loam	GC, GC-GM, SC, SC-SM	A-1-b, A-2, A-4	15-20	20-30	45-90	40-85	30-75	15-45	25-30	5-10
	40-60	Very cobbly sandy loam	GC-GM, GM, SC-SM	A-1-b, A-2	15-20	20-30	45-90	40-85	25-60	15-35	20-25	NP-5
Thornburgh, dry----------	0-14	Very cobbly sandy loam	SC, SC-SM, GC, GC-GM	A-1, A-2	10-25	30-60	45-85	40-85	25-60	20-35	25-30	5-10
	14-60	Very cobbly sandy loam, very cobbly loam, very channery loam	GC, GC-GM, SC, SC-SM	A-1, A-2, A-4	0-25	20-55	45-80	40-70	25-65	20-55	25-30	5-10
125:												
Massadona-------	0-3	Silty clay loam	ML	A-7	0	0	100	100	95-100	85-95	40-50	10-20
	3-50	Silty clay, clay, silty clay loam	CH, CL	A-7	0	0	100	100	100	90-100	40-55	25-35
	50-60	Silty clay, clay, silty clay loam	CH, CL	A-7	0	0	100	100	100	90-100	40-55	25-35
126:												
Massadona-------	0-5	Loam	CL, CL-ML	A-4	0	0	90-100	90-100	85-100	60-80	25-30	5-10
	5-35	Silty clay loam, clay, silty clay	CH, CL	A-7	0	0	100	100	100	90-100	40-55	25-35
	35-60	Silty clay loam, clay, silty clay	CH, CL	A-7	0	0	100	100	100	90-100	40-55	25-35
Youngston, moist----------	0-2	Loam	CL, CL-ML	A-4	0	0	100	100	70-80	60-75	25-30	5-10
	2-60	Stratified very fine sandy loam to clay loam	CL	A-6	0	0	100	100	80-100	60-80	30-40	10-20

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
127:												
Maudlin---------	0-12	Fine sandy loam	ML, SC-SM, SM	A-4	0	0	100	100	90-95	45-60	20-25	NP-5
	12-21	Sandy clay loam, fine sandy loam, loam	CL, CL-ML, SC, SC-SM	A-4	0	0	85-100	80-100	80-95	45-60	25-30	5-10
	21-30	Gravelly fine sandy loam, sandy clay loam, loam	CL-ML, SC-SM, SM	A-2, A-4	0	0	75-100	60-100	55-95	30-60	20-30	NP-10
	30-34	Unweathered bedrock			---	---	---	---	---	---	---	---
Duffymont-------	0-4	Very stony fine sandy loam	GC, GC-GM, SC-SM	A-2	30-50	20-30	60-75	60-75	50-70	25-35	25-30	5-10
	4-11	Extremely stony fine sandy loam, extremely flaggy fine sandy loam	GC, GC-GM, SC-SM	A-2	30-50	20-30	60-75	60-75	50-70	25-35	25-30	5-10
	11-15	Unweathered bedrock			---	---	---	---	---	---	---	---
128:												
Maybell---------	0-3	Sand	SM	A-2	0	0	100	100	60-70	5-15	---	NP
	3-20	Loamy sand, sand, loamy fine sand	SM	A-2	0	0	100	100	50-85	10-40	---	NP
	20-60	Sand, loamy sand, loamy fine sand	SM, SP-SM	A-2, A-3	0	0	100	100	55-85	5-30	---	NP
129:												
Maybell---------	0-3	Sand	SM	A-2	0	0	100	100	60-70	5-15	---	NP
	3-15	Sand, loamy sand, loamy fine sand	SM	A-2	0	0	100	100	50-85	10-40	---	NP
	15-60	Sand, loamy sand, loamy fine sand	SM, SP-SM	A-2, A-3	0	0	100	100	55-85	5-30	---	NP

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
130:												
Maysprings------	0-7	Coarse sandy loam	SC, SC-SM	A-2-4	0	0	90-100	80-95	50-60	20-30	25-30	5-10
	7-22	Coarse sandy loam, sandy clay loam, sandy loam	SC, SC-SM	A-2, A-4	0	0	95-100	85-100	50-75	25-50	25-35	5-10
	22-34	Coarse sandy loam	SM	A-2-4, A-4	0	0	90-100	85-95	50-60	30-40	20-25	NP-5
	34-60	Coarse sand, loamy coarse sand, gravelly coarse sand	SM, SP-SM	A-1	0	0	80-100	75-90	20-50	5-20	---	NP
131:												
Maysprings------	0-7	Loamy coarse sand	SM	A-1-b, A-2-4	0	0	90-100	80-95	40-60	15-30	---	NP
	7-22	Sandy clay loam, sandy loam	SC, SC-SM	A-2, A-4	0	0	95-100	85-100	50-75	25-50	25-35	5-10
	22-34	Coarse sandy loam	SM	A-2-4, A-4	0	0	90-100	85-95	50-60	30-40	20-25	NP-5
	34-60	Coarse sand, loamy coarse sand, gravelly coarse sand	SM, SP-SM	A-1	0	0	80-100	75-90	20-50	5-20	---	NP
Gretdivid-------	0-3	Loamy coarse sand	SM	A-1, A-2	0	0	95-100	85-95	45-70	15-25	20-25	NP-5
	3-7	Sandy clay loam, sandy loam	CL, SC, SC-SM	A-4	0	0	95-100	90-100	60-90	35-55	25-30	5-10
	7-60	Coarse sand, gravelly coarse sand, loamy coarse sand	SM, SP-SM	A-1	0	0	60-100	55-90	20-40	5-15	---	NP
132:												
Milren----------	0-6	Fine sandy loam	SC, SC-SM	A-4	0	0	95-100	90-100	75-85	35-50	25-30	5-10
	6-20	Clay loam, clay, sandy clay loam	CL	A-6, A-7	0	0	95-100	90-100	80-90	70-80	35-50	15-25
	20-60	Clay loam, clay	CL	A-6, A-7	0	0	95-100	90-100	80-90	70-80	35-50	15-25

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
133:												
Miracle---------	0-8	Sandy loam	CL, CL-ML, SC, SC-SM	A-4	0	0	80-100	75-100	60-85	30-55	25-30	5-10
	8-37	Sandy clay loam, loam, clay loam	CL, CL-ML	A-6	0-5	0-10	85-100	80-100	70-90	50-75	25-35	5-15
	37-41	Unweathered bedrock			---	---	---	---	---	---	---	---
Coldspring------	0-14	Loam	CL, CL-ML	A-4	0	0	95-100	90-100	70-85	45-60	25-30	5-10
	14-34	Clay loam, loam, sandy clay loam	CL	A-6	0	0	90-100	85-100	70-80	55-65	30-40	10-15
	34-47	Gravelly sandy clay loam, loam, sandy loam	SC, SC-SM	A-2, A-4	0	0-15	70-90	60-85	40-55	25-45	20-30	5-10
	47-51	Unweathered bedrock			---	---	---	---	---	---	---	---
134:												
Morapos---------	0-10	Loam	CL, CL-ML	A-4	0	0	100	100	90-100	55-70	25-30	5-10
	10-28	Clay loam, clay	CL	A-6, A-7	0	0	100	100	95-100	70-90	35-45	15-25
	28-60	Clay loam, clay	CL	A-6, A-7	0	0	100	100	95-100	75-90	30-50	10-30
135:												
Morapos---------	0-10	Loam	CL, CL-ML	A-4	0	0	100	100	90-100	55-70	25-30	5-10
	10-28	Clay loam, clay	CL	A-6, A-7	0	0	100	100	95-100	70-90	35-45	15-25
	28-60	Clay loam, clay	CL	A-6, A-7	0	0	100	100	95-100	75-90	30-50	10-30
136:												
Morapos---------	0-9	Clay loam	CL	A-6	0	0	100	100	95-100	60-80	30-40	10-20
	9-23	Clay, clay loam	CL	A-6, A-7	0	0	100	100	95-100	70-90	35-45	15-25
	23-60	Clay loam, clay	CL	A-6, A-7	0	0	100	100	95-100	75-90	30-50	10-30
Pagoda----------	0-9	Loam	CL, CL-ML	A-4	0	0	100	100	85-95	60-75	25-30	5-10
	9-17	Clay loam	CL	A-6	0	0	100	100	95-100	70-80	30-35	10-15
	17-31	Clay, clay loam	CL	A-6, A-7	0	0	100	100	95-100	70-95	35-50	15-25
	31-60	Clay loam, clay	CL	A-6, A-7	0	0	95-100	90-100	85-100	65-95	30-50	10-25
137:												
Morset----------	0-7	Sandy loam	SC, SC-SM	A-2, A-4	0	0	90-100	90-100	60-70	30-40	25-30	5-10
	7-20	Sandy clay loam, loam	CL, SC	A-6	0	0	90-100	80-100	80-90	45-75	30-35	10-15
	20-60	Loam, sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	90-100	80-100	80-85	40-60	10-25	NP-10

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
137:												
Youga	0-12	Fine sandy loam	SC, SC-SM	A-4	0	0	100	95-100	85-95	40-50	20-25	5-10
	12-24	Sandy clay loam	CL, CL-ML, SC, SC-SM	A-4	0	0	85-100	75-100	70-90	45-60	25-35	5-10
	24-40	Fine sandy loam, sandy clay loam	CL, CL-ML, SC, SC-SM	A-4	0	0	85-100	75-100	70-95	40-55	20-30	5-10
	40-60	Fine sandy loam	SC, SC-SM	A-4	0	0	85-100	75-100	70-90	35-45	20-25	5-10
138:												
Moyerson	0-1	Silty clay loam	ML	A-7	0	0	95-100	95-100	95-100	85-95	40-50	10-20
	1-17	Silty clay, clay	CH, CL	A-7	0	0-15	90-100	90-100	85-100	75-95	45-55	20-30
	17-21	Weathered bedrock			---	---	---	---	---	---	---	---
Rentsac	0-2	Channery sandy loam	SM	A-1	0-5	10-20	55-80	55-75	35-50	20-30	20-25	NP-5
	2-10	Very channery sandy loam	GC-GM, GM	A-1	0-5	20-40	30-55	30-50	20-35	10-20	20-25	NP-5
	10-14	Unweathered bedrock			---	---	---	---	---	---	---	---
139:												
Muggins	0-1	Moderately decomposed plant material	PT		0	0	100	100	---	---	---	---
	1-19	Gravelly sandy loam	GC, SC, SC-SM	A-2-4	0	0-10	60-80	55-75	35-50	20-30	25-30	5-10
	19-23	Clay loam, clay	CL	A-6, A-7	0	0-5	90-100	80-100	75-95	70-90	35-45	15-25
	23-51	Clay	CL	A-7	0	0-5	90-100	85-100	80-95	75-90	40-50	20-25
	51-60	Clay loam, sandy clay loam	CL	A-6	0	0-5	90-100	80-100	70-90	50-75	30-40	10-20

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
140:												
Ninot----------	0-3	Very gravelly loam	GC, GC-GM	A-1, A-2, A-4	0	0-10	35-55	30-50	25-50	20-40	25-30	5-10
	3-7	Gravelly loam, gravelly clay loam	CL, CL-ML	A-4	0	0-10	70-80	60-75	55-70	40-60	25-30	5-10
	7-32	Gravelly loam, gravelly clay loam	CL, CL-ML, SC, SC-SM	A-4	0	0-10	65-85	55-75	50-75	35-60	20-30	5-10
	32-60	Gravelly loam, gravelly clay loam	CL, CL-ML, SC, SC-SM	A-4	0	0-10	65-80	55-75	50-75	35-60	20-30	5-10
Crago----------	0-4	Very cobbly loam	GC-GM, SC-SM	A-2, A-4	0-10	20-30	45-90	40-85	35-80	25-65	25-30	5-10
	4-33	Extremely gravelly sandy clay loam, very gravelly clay loam, very gravelly loam	GC, GC-GM, GM	A-2	0	15-25	35-55	30-50	25-50	20-40	20-30	NP-10
	33-60	Extremely gravelly sandy clay loam, extremely gravelly sandy loam, very cobbly loam	GC-GM	A-2	0-5	25-40	15-30	10-25	5-20	5-15	25-30	5-10
Garlips---------	0-8	Loam	CL, CL-ML	A-4	0	0	90-100	85-100	80-95	55-70	25-30	5-10
	8-21	Clay loam, loam	CL, CL-ML	A-4, A-6	0	0	90-100	85-100	80-100	60-80	25-40	5-15
	21-60	Clay loam, gravelly clay loam, gravelly loam	CL, CL-ML	A-4, A-6	0	0-10	80-95	70-90	60-80	50-75	25-35	5-15
141:												
Nortez, cool----	0-5	Loam	CL, CL-ML	A-4	0	0	100	100	85-95	60-75	25-30	5-10
	5-10	Clay loam	CL	A-6	0	0	100	100	90-100	70-80	30-40	10-20
	10-26	Clay loam, clay	CH, CL	A-6, A-7-6	0	0	100	100	90-100	70-95	35-60	15-40
	26-30	Channery clay loam, channery clay	CH, CL, GC, SC	A-6, A-7-6	0-10	0-25	55-80	55-75	50-75	40-70	35-60	15-40
	30-34	Unweathered bedrock			---	---	---	---	---	---	---	---

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
141:												
Morapos---------	0-10	Loam	CL, CL-ML	A-4	0	0	100	100	90-100	55-70	25-30	5-10
	10-28	Clay loam, clay	CL	A-6, A-7	0	0	100	100	95-100	70-90	35-45	15-25
	28-60	Clay loam, clay	CL	A-6, A-7	0	0	100	100	95-100	75-90	30-50	10-30
142:												
Nortez, cool----	0-5	Loam	CL, CL-ML	A-4	0	0	100	100	85-95	60-75	25-30	5-10
	5-10	Clay loam	CL	A-6	0	0	100	100	90-100	70-80	30-40	10-20
	10-26	Clay loam, clay	CH, CL	A-6, A-7-6	0	0	100	100	90-100	70-95	35-60	15-40
	26-30	Channery clay loam, channery clay	CH, CL, GC, SC	A-6, A-7-6	0-10	0-25	55-80	55-75	50-75	40-70	35-60	15-40
	30-34	Unweathered bedrock			---	---	---	---	---	---	---	---
Morapos---------	0-10	Loam	CL, CL-ML	A-4	0	0	100	100	90-100	55-70	25-30	5-10
	10-28	Clay loam, clay	CL	A-6, A-7	0	0	100	100	95-100	70-90	35-45	15-25
	28-60	Clay loam, clay	CL	A-6, A-7	0	0	100	100	95-100	75-90	30-50	10-30
143:												
Nunemaker-------	0-1	Clay loam	CL	A-6	0	0	90-100	85-100	75-100	65-85	35-40	15-20
	1-26	Clay	CH, CL	A-7	0	0	95-100	90-100	85-95	75-95	45-60	20-35
	26-40	Clay	CH, CL	A-7	0	0	95-100	90-100	85-95	75-90	45-60	20-35
	40-45	Clay loam, clay	CL	A-6, A-7	0	0	90-100	85-100	80-95	70-90	35-50	15-25
	45-60	Gravelly sandy clay loam, clay loam	CL, CL-ML, SC, SC-SM	A-2-4, A-4, A-6	0	0	70-95	55-90	45-75	20-55	25-35	5-15
144:												
Pagoda----------	0-9	Loam	CL, CL-ML	A-4	0	0	100	100	85-95	60-75	25-30	5-10
	9-17	Clay loam	CL	A-6	0	0	100	100	95-100	70-80	30-35	10-15
	17-25	Clay, clay loam	CL	A-6, A-7	0	0	100	100	95-100	70-95	35-50	15-25
	25-60	Clay, clay loam	CL	A-6, A-7	0	0	95-100	90-100	85-100	65-95	30-50	10-25
145:												
Pagoda----------	0-9	Clay loam	CL	A-6	0	0	100	100	95-100	70-80	30-35	10-15
	9-17	Clay loam	CL	A-6	0	0	100	100	95-100	70-80	30-35	10-15
	17-25	Clay, clay loam	CL	A-6, A-7	0	0	100	100	95-100	70-95	35-50	15-25
	25-60	Clay, clay loam	CL	A-6, A-7	0	0	95-100	90-100	85-100	65-95	30-50	10-25
146:												
Pavillion-------	0-3	Loam	CL-ML	A-4	0	0	100	95-100	80-90	60-75	20-30	5-10
	3-36	Clay loam, loam	CL	A-4, A-6	0	0	100	95-100	90-95	65-80	25-40	5-20
	36-40	Weathered bedrock			---	---	---	---	---	---	---	---

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
146:												
Degater---------	0-3	Very gravelly silty clay	GM	A-7	0	0-10	50-60	35-50	30-50	25-45	45-55	15-25
	3-22	Clay, silty clay	CH, CL	A-7	0	0	85-100	80-100	75-100	70-95	40-55	15-30
	22-30	Clay, silty clay, silty clay loam	CH, CL	A-6, A-7	0	0	100	100	95-100	70-100	30-55	15-35
	30-34	Weathered bedrock			---	---	---	---	---	---	---	---
147:												
Peeler----------	0-1	Slightly decomposed plant material	PT		0	0	100	100	---	---	---	---
	1-18	Stony fine sandy loam	SC, SC-SM	A-4	0-5	5-15	90-100	70-85	50-70	30-45	25-30	5-10
	18-45	Sandy clay loam, gravelly sandy clay loam, cobbly sandy clay loam	CL, SC	A-2, A-6	0-10	0-45	80-95	75-90	65-85	30-55	30-40	10-20
	45-60	Gravelly sandy clay loam, sandy loam	SC, SC-SM	A-2-4	0	0-10	70-85	65-80	60-75	25-35	25-35	5-10
148:												
Pilotpeak-------	0-2	Gravelly sandy loam	SC-SM, SM	A-1-b, A-2-4, A-4	0	0	60-80	50-75	40-65	20-45	20-25	NP-5
	2-6	Very gravelly sandy loam, gravelly sandy loam	GC-GM, GM, SM	A-1-b	0	0-10	55-80	45-70	20-35	10-25	20-25	NP-5
	6-17	Extremely gravelly sandy loam, very gravelly sandy loam	GC-GM, GM, GP-GM	A-1-a, A-1-b	0	0-10	25-45	25-40	15-30	10-25	20-25	NP-5
	17-21	Unweathered bedrock			---	---	---	---	---	---	---	---

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
148:												
Grubrob---------	0-3	Fine sandy loam	SC-SM	A-4	0	0	90-100	90-100	80-90	40-55	20-25	NP-5
	3-18	Sandy clay loam	CL-ML	A-4	0	0	90-100	90-100	80-90	50-60	25-30	5-10
	18-28	Very gravelly fine sandy loam, gravelly fine sandy loam	GC-GM, SC-SM	A-1, A-2	0	0-10	50-65	45-60	40-50	20-30	20-25	5-10
	28-32	Unweathered bedrock			---	---	---	---	---	---	---	---
149:												
Pinelli---------	0-6	Loam	CL-ML	A-4	0	0	100	95-100	85-95	60-70	25-30	5-10
	6-18	Clay loam, clay, sandy clay	CL	A-6, A-7	0	0	100	95-100	85-95	75-90	35-45	15-20
	18-60	Clay loam, sandy clay loam	CL, SC	A-6	0	0	100	95-100	80-95	45-80	30-40	10-20
150:												
Pinelli---------	0-4	Clay loam	CL	A-6	0	0	100	95-100	90-95	75-85	30-40	10-20
	4-21	Clay, clay loam, sandy clay	CL	A-6, A-7	0	0	100	95-100	85-95	75-90	35-45	15-20
	21-60	Sandy clay loam, clay loam	CL, SC	A-6	0	0	100	95-100	80-95	45-80	30-40	10-20
151:												
Pinelli, dry----	0-7	Loam	CL-ML	A-4	0	0	100	95-100	85-95	60-70	25-30	5-10
	7-20	Sandy clay, clay loam, clay	CL	A-6, A-7	0	0	100	95-100	85-95	75-90	35-45	15-20
	20-60	Clay loam, sandy clay loam	CL, SC	A-6	0	0	100	95-100	80-95	45-80	30-40	10-20

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
152:												
Pinridge--------	0-5	Loam	CL-ML	A-4	0	0	95-100	95-100	95-100	70-75	25-30	5-10
	5-20	Sandy clay loam, loam, clay loam	CL, CL-ML	A-4	0	0	95-100	95-100	95-100	60-80	25-35	5-10
	20-41	Sandy clay loam, loam, clay loam	CL, CL-ML	A-4	0	0	95-100	95-100	95-100	60-80	25-35	5-10
	41-60	Sandy loam, loam, sandy clay loam	CL, CL-ML, SC, SC-SM	A-4	0	0	95-100	95-100	90-100	45-70	25-30	5-10
153:												
Pricecreek------	0-4	Clay loam	CL	A-6	0	0	100	100	95-100	65-80	30-40	10-20
	4-21	Clay loam, clay	CL	A-6, A-7	0	0	100	100	95-100	80-90	35-50	15-25
	21-35	Clay loam, clay	CL	A-6, A-7	0	0	100	100	95-100	75-85	30-50	10-30
	35-60	Clay loam, clay	CL	A-6, A-7	0	0	100	100	95-100	75-85	30-50	10-30
154:												
Quealman--------	0-3	Sand	SM	A-2	0	0	90-100	80-100	50-70	5-15	---	NP
	3-40	Stratified loamy sand to fine sandy loam	SC-SM	A-2	0	0	90-100	80-100	50-85	15-55	20-25	NP-5
	40-60	Stratified loamy sand to fine sandy loam	SC-SM, SM	A-2	0	0	90-100	80-100	50-85	15-45	20-25	NP-5
155:												
Rencot----------	0-2	Extremely channery loam	GC-GM	A-1, A-2	0-5	40-70	45-55	35-45	30-40	20-30	20-25	5-10
	2-13	Extremely channery loam, extremely flaggy loam	GC-GM	A-1, A-2	0-5	50-70	45-55	35-45	30-40	20-30	20-25	5-10
	13-17	Unweathered bedrock			---	---	---	---	---	---	---	---

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
155:												
Duffymont-------	0-2	Extremely flaggy fine sandy loam	GC, GC-GM, SC-SM	A-2	30-50	20-30	60-75	60-75	50-65	25-35	25-30	5-10
	2-12	Extremely flaggy fine sandy loam, extremely stony fine sandy loam	GC, GC-GM, SC-SM	A-2	30-50	20-30	60-75	60-75	50-70	25-35	25-30	5-10
	12-16	Unweathered bedrock			---	---	---	---	---	---	---	---
156:												
Rentsac---------	0-3	Channery sandy loam	SM	A-1	0-5	10-20	55-80	55-75	35-50	20-30	20-25	NP-5
	3-10	Very channery sandy loam	GC-GM, GM	A-1	0-5	20-40	30-55	30-50	20-35	10-20	20-25	NP-5
	10-14	Unweathered bedrock			---	---	---	---	---	---	---	---
157:												
Rentsac---------	0-2	Very channery sandy loam	GC-GM, GM	A-1	0-5	15-25	30-55	30-50	20-35	10-20	20-25	NP-5
	2-10	Very channery sandy loam	GC-GM, GM	A-1	0-5	20-40	30-55	30-50	20-35	10-20	20-25	NP-5
	10-14	Unweathered bedrock			---	---	---	---	---	---	---	---
Moyerson--------	0-1	Channery silty clay loam	ML	A-7	0	10-20	55-80	55-75	55-75	50-70	40-50	10-20
	1-17	Clay, silty clay	CH, CL	A-7	0	0-15	90-100	90-100	85-100	75-95	45-55	20-30
	17-21	Weathered bedrock			---	---	---	---	---	---	---	---
158:												
Rock outcrop----	0-60	Unweathered bedrock			---	---	---	---	---	---	0-14	---

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
158:												
Earsman---------	0-2	Extremely stony loamy sand	GC-GM, GM	A-1	25-35	20-30	50-60	45-55	10-35	5-20	20-25	NP-5
	2-12	Extremely stony sandy loam, very stony sandy loam	GC, GP-GC	A-1, A-2-4	20-35	20-30	50-65	45-65	10-55	5-25	25-30	5-10
	12-16	Unweathered bedrock			---	---	---	---	---	---	---	---
159:												
Rock outcrop----	0-60	Unweathered bedrock			---	---	---	---	---	---	0-14	---
Haploborolls----	0-8	Gravelly sandy loam	SC-SM, GC-GM, SC	A-1, A-2	0-5	0-10	60-80	55-75	35-50	20-30	25-30	5-10
	8-24	Very cobbly sandy loam, very cobbly sandy clay loam, cobbly sandy loam	GC-GM, SC, SC-SM	A-2-4, A-4	0-15	0-40	60-95	55-95	45-80	25-65	20-35	5-15
	24-28	Unweathered bedrock			---	---	---	---	---	---	---	---
160:												
Rock outcrop----	0-60	Unweathered bedrock			---	---	---	---	---	---	0-14	---
Torriorthents---	0-2	Channery sandy loam	GC, GC-GM, SC, SC-SM	A-1, A-2-4	0-10	10-25	55-80	55-75	35-50	20-30	25-30	5-10
	2-14	Very channery sandy loam, channery clay loam	GC, GC-GM	A-1, A-2-4	10-30	10-40	55-65	50-65	35-55	20-45	25-30	5-10
	14-18	Unweathered bedrock			---	---	---	---	---	---	---	---

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
161:												
Rock River------	0-3	Sandy loam	SC, SC-SM	A-2-4, A-4	0	0	95-100	90-100	70-80	30-50	25-30	5-10
	3-22	Sandy clay loam	CL, CL-ML, SC, SC-SM	A-4, A-6	0	0	95-100	90-100	75-85	45-60	25-35	5-15
	22-32	Sandy clay loam, sandy loam	SC, SC-SM	A-4	0	0	95-100	90-100	70-85	35-50	25-30	5-10
	32-60	Sandy loam, loamy sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	90-100	65-80	25-45	20-25	NP-5
162:												
Rock River------	0-3	Sandy loam	SC, SC-SM	A-2-4, A-4	0	0	95-100	90-100	70-80	30-50	25-30	5-10
	3-22	Sandy clay loam	CL, CL-ML, SC, SC-SM	A-4, A-6	0	0	95-100	90-100	75-85	45-60	25-35	5-15
	22-32	Sandy clay loam, sandy loam	SC, SC-SM	A-4	0	0	95-100	90-100	70-85	35-50	25-30	5-10
	32-60	Sandy loam, loamy sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	90-100	65-80	25-45	20-25	NP-5
163:												
Rock River------	0-3	Sandy loam	SC, SC-SM	A-2-4, A-4	0	0	95-100	90-100	70-80	30-50	25-30	5-10
	3-22	Sandy clay loam	CL, CL-ML, SC, SC-SM	A-4, A-6	0	0	95-100	90-100	75-85	45-60	25-35	5-15
	22-32	Sandy clay loam, sandy loam	SC, SC-SM	A-4	0	0	95-100	90-100	70-85	35-50	25-30	5-10
	32-60	Sandy loam, loamy sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	90-100	65-80	25-45	20-25	NP-5
164:												
Rock River------	0-2	Loamy sand	SC-SM, SM	A-2-4	0	0-5	90-100	90-100	65-75	25-35	20-25	NP-5
	2-21	Sandy clay loam	CL, CL-ML, SC, SC-SM	A-4, A-6	0	0	95-100	90-100	75-85	45-60	25-35	5-15
	21-48	Sandy loam, sandy clay loam	SC, SC-SM	A-4	0	0	95-100	90-100	70-85	35-50	25-30	5-10
	48-60	Sandy loam, loamy sand	SC-SM, SM	A-2-4, A-4	0	0	95-100	90-100	65-80	25-45	20-25	NP-5

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
164:												
Taffom----------	0-8	Sandy loam	SC, SC-SM	A-2-4	0	0	100	90-100	60-70	25-35	25-30	5-10
	8-41	Sandy clay loam	CL, CL-ML, SC	A-4	0	0	100	85-100	80-90	35-55	25-30	5-10
	41-50	Sandy loam, sandy clay loam, loam	CL-ML, SC-SM	A-4	0	0	100	85-100	60-75	35-60	20-25	5-10
	50-60	Loamy sand, sandy loam, loam	SC-SM, SM	A-2-4, A-4	0	0	100	80-100	40-55	15-50	15-25	NP-5
165:												
Rogrube sandy loam----------	0-3	Sandy loam	CL-ML, SC-SM	A-4	0	0	100	100	80-90	45-55	15-20	5-10
	3-28	Clay loam, silty clay loam	CL	A-6	0	0	100	100	85-100	70-80	30-35	10-15
	28-60	Clay loam, sandy clay loam, silty clay loam	CL, CL-ML	A-4, A-6	0	0	100	90-100	80-100	55-80	25-35	5-15
Rogrube clay loam----------	0-3	Clay loam	CL	A-6	0	0	100	100	85-100	70-80	30-35	10-15
	3-28	Clay loam, silty clay loam	CL	A-6	0	0	100	100	85-100	70-80	30-35	10-15
	28-60	Clay loam, sandy clay loam, silty clay loam	CL, CL-ML	A-4, A-6	0	0	100	90-100	80-100	55-80	25-35	5-15
166:												
Routt----------	0-2	Slightly decomposed plant material	PT		0	0	100	100	---	---	---	---
	2-27	Loam	CL-ML	A-4	0	0	100	95-100	90-100	70-80	25-30	5-10
	27-33	Clay loam, silty clay loam	CL	A-6	0	0	100	95-100	95-100	75-90	35-45	15-20
	33-60	Clay, clay loam, silty clay	CL	A-7	0	0	100	95-100	95-100	80-90	35-45	15-20

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
167:												
Routt----------	0-24	Loam	CL-ML	A-4	0	0	100	95-100	90-100	70-80	25-30	5-10
	24-35	Clay loam, silty clay loam	CL	A-6	0	0	100	95-100	95-100	75-90	35-45	15-20
	35-60	Clay loam, clay, silty clay	CL	A-7	0	0	100	95-100	95-100	80-90	35-45	15-20
Cochetopa-------	0-5	Loam	CL, CL-ML	A-4	0	0	95-100	95-100	95-100	70-80	25-30	5-10
	5-21	Clay loam, loam	CL, CL-ML	A-4, A-6	0-5	0-10	95-100	95-100	90-100	70-85	25-35	5-15
	21-30	Clay, clay loam	CH, CL	A-7	0-5	0-10	95-100	95-100	90-100	75-90	40-55	20-30
	30-60	Clay, clay loam	CL	A-7	0-5	0-10	95-100	90-100	90-100	75-90	40-50	20-30
Binco----------	0-4	Cobbly clay loam	CL, GC, SC	A-6	5-10	15-35	70-80	60-75	50-75	40-60	35-40	15-20
	4-35	Clay, clay loam	CL	A-6, A-7	0-5	0-10	90-100	85-95	80-90	65-80	35-45	15-25
	35-60	Clay loam, clay	CL	A-6, A-7	0	0	95-100	95-100	85-100	65-85	35-50	15-25
168:												
Ruedloff--------	0-4	Sandy loam	SC, SC-SM	A-2, A-4	0	0	95-100	95-100	60-70	30-40	25-30	5-10
	4-20	Sandy loam, coarse sandy loam	SC, SC-SM	A-2, A-4	0	0	90-100	85-100	50-75	25-45	25-30	5-10
	20-60	Loamy coarse sand, coarse sand, loamy sand	SP-SM, SM	A-1, A-2	0	0	90-100	85-100	45-65	10-30	---	NP
169:												
Ruedloff--------	0-2	Loamy coarse sand	SM	A-1, A-2	0	0	90-100	85-90	45-70	10-25	---	NP
	2-24	Coarse sandy loam, sandy loam	SC, SC-SM	A-2, A-4	0	0	90-100	85-100	50-75	25-45	25-30	5-10
	24-60	Coarse sand, loamy coarse sand, loamy sand	SM, SP-SM	A-1, A-2	0	0	90-100	85-100	45-65	10-30	---	NP

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
169:												
Dunul----------	0-3	Very gravelly loamy coarse sand	SM, SP-SM	A-1	0	10-20	65-75	50-60	30-40	10-20	---	NP
	3-20	Very gravelly loamy coarse sand, gravelly loamy coarse sand, very gravelly coarse sand	SM, SP	A-1	0	10-20	65-75	50-60	30-45	0-20	---	NP
	20-31	Extremely gravelly loamy coarse sand, very gravelly coarse sand	GM, GP, SM, SP	A-1	0	15-25	40-70	25-50	10-30	0-15	---	NP
	31-60	Gravelly loamy coarse sand, very gravelly coarse sand	SM, SP	A-1	0	10-20	70-85	50-70	25-45	0-20	---	NP
170:												
Ryan Park-------	0-5	Loamy sand	SC-SM, SM	A-2	0	0	100	95-100	50-75	20-35	20-25	NP-5
	5-23	Sandy loam	SC, SC-SM	A-4	0	0	100	95-100	60-70	35-45	25-30	5-10
	23-30	Sandy loam	SC, SC-SM	A-4	0	0	100	95-100	60-70	35-45	25-30	5-10
	30-60	Loamy sand	SC-SM, SM	A-2	0	0	100	95-100	60-75	25-30	20-25	NP-5
171:												
Ryan Park-------	0-5	Sandy loam	SC-SM, SM	A-4	0	0	100	95-100	70-85	30-40	20-25	NP-5
	5-23	Sandy loam	SC, SC-SM	A-4	0	0	100	95-100	60-70	35-45	25-30	5-10
	23-30	Sandy loam	SC, SC-SM	A-4	0	0	100	95-100	60-70	35-45	25-30	5-10
	30-39	Loamy sand	SC-SM, SM	A-2	0	0	100	95-100	60-75	25-30	20-25	NP-5
	39-60	Sand	SM, SP-SM	A-2	0	0	90-100	80-100	55-70	10-20	---	NP
172:												
Ryan Park-------	0-5	Loamy sand	SC-SM, SM	A-2	0	0	100	95-100	50-75	20-35	20-25	NP-5
	5-30	Sandy loam	SC, SC-SM	A-4	0	0	100	95-100	60-70	35-45	25-30	5-10
	30-60	Loamy sand	SC-SM, SM	A-2	0	0	100	95-100	60-75	25-30	20-25	NP-5
Coyet----------	0-6	Loamy sand	SC-SM, SM	A-2	0	0	95-100	90-100	85-95	30-35	20-25	NP-5
	6-22	Loamy sand, loamy fine sand	SC-SM, SM	A-2	0	0	85-100	80-100	75-95	30-35	20-25	NP-5
	22-60	Loamy sand, loamy fine sand, sand	SC-SM, SM	A-2	0	0	85-100	80-100	75-90	20-30	15-20	NP-5

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
173:												
Ryark----------	0-6	Loamy sand	SC-SM, SM	A-2	0	0	100	95-100	50-75	20-30	20-25	NP-5
	6-19	Sandy loam, coarse sandy loam	SC, SC-SM	A-2, A-4	0	0	100	90-100	60-80	30-40	25-30	5-10
	19-30	Loamy sand	SC-SM, SM	A-2	0	0	100	95-100	65-75	15-25	20-25	NP-5
	30-60	Sand, coarse sand	SM, SP-SM	A-1, A-2	0	0	100	90-100	40-65	5-15	---	NP
Powderwash------	0-3	Loamy sand	SM	A-2	0	0	95-100	90-100	60-80	20-30	20-25	NP-5
	3-15	Sandy loam, sandy clay loam	SC, SC-SM	A-2	0	0	100	95-100	70-85	25-35	25-30	5-10
	15-22	Coarse sandy loam, sandy loam	SC-SM	A-2	0	0	90-100	80-95	45-70	15-25	20-25	5-10
	22-38	Clay, clay loam	CL	A-7	0	0	100	100	95-100	70-85	35-50	15-25
	38-42	Weathered bedrock			---	---	---	---	---	---	---	---
174:												
Ryark----------	0-6	Loamy sand	SC-SM, SM	A-2	0	0	100	95-100	50-75	20-30	20-25	NP-5
	6-19	Sandy loam, coarse sandy loam	SC, SC-SM	A-2, A-4	0	0	100	90-100	60-80	30-40	25-30	5-10
	19-30	Loamy sand	SC-SM, SM	A-2	0	0	100	95-100	65-75	15-25	20-25	NP-5
	30-60	Sand, coarse sand	SM, SP-SM	A-1, A-2	0	0	100	90-100	40-65	5-15	---	NP
Maybell---------	0-3	Sand	SM	A-2	0	0	100	100	60-70	5-15	---	NP
	3-20	Sand, loamy sand, loamy fine sand	SM	A-2	0	0	100	100	50-85	10-40	---	NP
	20-60	Sand, loamy sand, loamy fine sand	SM, SP-SM	A-2, A-3	0	0	100	100	55-85	5-30	---	NP

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
175:												
Sandwash--------	0-2	Loam	CL, CL-ML	A-4	0	0	95-100	90-100	85-95	60-75	25-30	5-10
	2-16	Loam, clay loam, channery loam	CL, CL-ML, ML	A-4	0	0-10	60-100	55-90	50-90	40-70	20-30	NP-10
	16-22	Extremely cobbly loam, extremely cobbly clay loam, very channery loam	CL, CL-ML, SC, SC-SM	A-2, A-4	0-15	55-75	60-85	55-75	50-70	20-60	25-30	5-10
	22-26	Unweathered bedrock			---	---	---	---	---	---	---	---
Langspring------	0-3	Sandy loam	CL-ML, ML, SC-SM, SM	A-2, A-4	0	0	95-100	85-100	60-85	30-55	20-25	NP-5
	3-42	Sandy clay loam, loam, sandy loam	CL	A-6	0	0	80-100	75-100	65-85	50-75	25-30	10-15
	42-60	Sandy loam, loam, sandy clay loam	CL	A-6	0	0	85-100	80-100	70-85	50-70	25-30	10-15
Baston----------	0-1	Sandy loam	SC, SC-SM	A-2, A-4	0	0	95-100	90-100	60-70	30-40	25-30	5-10
	1-28	Silty clay, silty clay loam, clay loam	CL	A-7	0	0	95-100	90-100	75-95	70-95	40-50	20-30
	28-32	Weathered bedrock			---	---	---	---	---	---	---	---
176:												
Schooner--------	0-4	Loamy sand	SM	A-1, A-2	0	0	80-100	75-100	40-75	15-30	---	NP
	4-14	Loamy fine sand, fine sand	SM	A-2	0	0	80-100	75-100	50-85	20-45	20-25	NP-5
	14-18	Unweathered bedrock			---	---	---	---	---	---	---	---
Rock outcrop----	0-60	Unweathered bedrock			---	---	---	---	---	---	0-14	---

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
177:												
Schooner---------	0-4	Loamy sand	SM	A-1, A-2	0	0	80-100	75-100	40-75	15-30	---	NP
	4-14	Loamy fine sand, fine sand	SM	A-2	0	0	80-100	75-100	50-85	20-45	20-25	NP-5
	14-18	Unweathered bedrock			---	---	---	---	---	---	---	---
Tricera---------	0-4	Loamy sand	SM	A-2	0	0	100	100	80-90	20-30	15-25	NP-5
	4-47	Loamy fine sand, loamy sand, sand	SM	A-2	0	0	100	100	80-95	15-35	15-25	NP-5
	47-60	Fine sand, sand	SM	A-2	0	0	100	100	80-95	15-20	---	NP
178:												
Simanni---------	0-10	Coarse sandy loam	SC-SM, SM	A-2	0	0	95-100	90-100	50-60	20-30	20-25	NP-5
	10-22	Sandy clay loam	SC, SC-SM	A-4	0	0	95-100	90-100	60-70	35-45	25-30	5-10
	22-33	Coarse sandy loam	SC, SC-SM	A-2	0	0	95-100	90-100	55-60	25-35	20-25	5-10
	33-60	Loamy coarse sand, coarse sand	SM, SP-SM	A-1, A-2	0	0	95-100	90-100	45-55	10-25	20-25	NP-5
Ruedloff--------	0-2	Loamy coarse sand	SM	A-1, A-2	0	0	90-100	85-90	45-70	10-25	---	NP
	2-24	Coarse sandy loam, sandy loam	SC, SC-SM	A-2, A-4	0	0	90-100	85-100	50-75	25-45	25-30	5-10
	24-60	Loamy coarse sand, coarse sand, loamy sand	SM, SP-SM	A-1, A-2	0	0	90-100	85-100	45-65	10-30	---	NP
179:												
Skyway, dry-----	0-20	Fine sandy loam	CL, CL-ML, SC, SC-SM	A-2, A-4	0	0-10	90-100	80-100	60-85	30-55	25-30	5-10
	20-31	Gravelly sandy loam, sandy loam, fine sandy loam	SM	A-2, A-4	0	0-30	75-100	70-100	60-80	25-50	20-30	NP-5
	31-35	Unweathered bedrock			---	---	---	---	---	---	---	---

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
180:												
Spool	0-4	Loamy fine sand	SM	A-2	0	0-10	85-100	80-100	65-95	30-50	20-25	NP-5
	4-12	Loamy fine sand, channery loamy fine sand	SM	A-2	0	0-10	70-95	65-90	40-90	20-40	20-25	NP-5
	12-16	Unweathered bedrock			---	---	---	---	---	---	---	---
Maybell	0-3	Loamy fine sand	SM	A-2	0	0	100	100	70-85	30-45	---	NP
	3-32	Loamy fine sand, sand, loamy sand	SM	A-2	0	0	100	100	50-85	10-40	---	NP
	32-60	Sand, loamy sand, loamy fine sand	SM, SP-SM	A-2, A-3	0	0	100	100	55-85	5-30	---	NP
181:												
Stunner	0-4	Sandy loam	SC, SC-SM	A-2, A-4	0	0	95-100	95-100	75-80	30-40	25-30	5-10
	4-15	Sandy clay loam, sandy loam	SC-SM	A-4	0	0	95-100	95-100	80-85	35-50	25-30	5-10
	15-24	Sandy loam, loamy sand	SM	A-2	0	0	90-100	85-100	50-70	20-35	20-25	NP-5
	24-43	Sandy loam, loamy sand, gravelly sandy loam	SM	A-1, A-2	0	0-10	80-90	75-80	35-60	15-30	20-25	NP-5
	43-60	Loamy sand, sand, gravelly loamy sand	SM, SP-SM	A-1	0	0-10	80-90	75-80	30-50	10-20	15-20	NP-5
182:												
Stunner, moist	0-5	Loam	CL, CL-ML	A-4	0	0-5	90-100	85-100	80-95	60-70	25-30	5-10
	5-17	Clay loam, loam	CL	A-6	0	0-5	95-100	90-100	90-100	75-85	25-35	10-20
	17-42	Loam, clay loam	CL, CL-ML	A-4, A-6	0	0-10	80-100	75-100	75-100	60-80	25-35	5-15
	42-60	Sandy loam, loam	CL, CL-ML, SC, SC-SM	A-4	0	0-10	80-100	75-100	65-90	45-65	25-30	5-10
Emlin	0-11	Loam	CL, CL-ML	A-4	0	0-5	90-100	85-100	80-95	60-75	25-30	5-10
	11-19	Clay loam, loam	CL	A-6	0	0-5	95-100	90-100	85-100	60-80	30-40	10-20
	19-60	Silty clay loam, clay loam, loam	CL, CL-ML	A-4	0	0-10	80-100	75-100	75-100	60-90	25-35	5-10

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
183:												
Styers----------	0-1	Clay	CL	A-7-6	0	0	100	100	100	80-100	40-45	20-25
	1-35	Clay	CH	A-7-6	0	0	100	100	100	95-100	50-65	25-40
	35-39	Weathered bedrock			---	---	---	---	---	---	---	---
Ironsprings-----	0-14	Loamy coarse sand	SM	A-2	0	0	90-100	85-90	50-55	15-20	---	NP
	14-40	Coarse sandy loam, sandy loam	SC, SC-SM, SM	A-2, A-4	0	0	90-100	85-100	50-70	25-40	20-30	NP-10
	40-60	Loamy coarse sand, loamy sand, coarse sand	SM, SP-SM	A-2	0	0	90-100	85-100	50-60	10-25	---	NP
Maysprings------	0-7	Loamy coarse sand	SM	A-1-b, A-2-4	0	0	90-100	80-95	40-60	15-30	---	NP
	7-22	Sandy clay loam, sandy loam	SC, SC-SM	A-2, A-4	0	0	95-100	85-100	50-75	25-50	25-35	5-10
	22-28	Coarse sandy loam	SM	A-2-4, A-4	0	0	90-100	85-95	50-60	30-40	20-25	NP-5
	28-60	Coarse sand, loamy coarse sand, gravelly coarse sand	SM, SP-SM	A-1	0	0	80-100	75-90	20-50	5-20	---	NP
184:												
Styers----------	0-1	Silty clay loam	ML	A-7-6	0	0	100	100	100	85-95	40-50	10-20
	1-28	Clay	CH	A-7-6	0	0	100	100	100	95-100	50-65	25-40
	28-32	Weathered bedrock			---	---	---	---	---	---	---	---
Pinelli---------	0-8	Fine sandy loam	CL, CL-ML, SC, SC-SM	A-4	0	0	100	95-100	70-85	45-55	25-30	5-10
	8-26	Clay, clay loam, sandy clay	CL	A-6, A-7	0	0	100	95-100	85-95	75-90	35-45	15-20
	26-60	Clay loam, sandy clay loam	CL, SC	A-6	0	0	100	95-100	80-95	45-80	30-40	10-20

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
184:												
Taffom----------	0-6	Sandy loam	SC, SC-SM	A-2-4	0	0	100	90-100	60-70	25-35	25-30	5-10
	6-43	Sandy clay loam	CL, CL-ML, SC	A-4	0	0	100	85-100	80-90	35-55	25-30	5-10
	43-53	Loam, sandy clay loam, sandy loam	CL-ML, SC-SM	A-4	0	0	100	85-100	60-75	35-60	20-25	5-10
	53-60	Loamy sand, sandy loam, loam	SC-SM, SM	A-2-4, A-4	0	0	100	80-100	40-55	15-50	15-25	NP-5
185:												
Taffom----------	0-6	Sandy loam	SC, SC-SM	A-2-4	0	0	100	90-100	60-70	25-35	25-30	5-10
	6-43	Sandy clay loam	CL, CL-ML, SC	A-4	0	0	100	85-100	80-90	35-55	25-30	5-10
	43-53	Loam, sandy clay loam, sandy loam	CL-ML, SC-SM	A-4	0	0	100	85-100	60-75	35-60	20-25	5-10
	53-60	Loam, sandy loam, loamy sand	SC-SM, SM	A-2-4, A-4	0	0	100	80-100	40-55	15-50	15-25	NP-5
186:												
Talamantes------	0-3	Loam	CL-ML	A-4	0	0	90-100	80-100	75-95	55-75	25-30	5-10
	3-48	Fine sandy loam, loam, clay loam	CL, CL-ML	A-4, A-6	0	0	90-100	80-100	75-95	55-85	25-40	5-15
	48-60	Sandy loam, loam	CL-ML	A-4	0	0	90-100	80-100	70-95	50-75	25-35	5-10
187:												
Talamantes------	0-3	Loam	CL-ML	A-4	0	0	90-100	80-100	75-95	55-75	25-30	5-10
	3-48	Loam, clay loam	CL, CL-ML	A-4, A-6	0	0	90-100	80-100	75-95	55-85	25-40	5-15
	48-60	Sandy loam, loam	CL-ML	A-4	0	0	90-100	80-100	70-95	50-75	25-35	5-10
188:												
Talamantes, saline---------	0-3	Loam	CL, CL-ML	A-4	0	0	100	100	90-95	55-65	25-35	5-10
	3-24	Clay loam	CL	A-6	0	0	100	100	90-100	65-70	30-40	10-20
	24-60	Loam	CL	A-6	0	0	100	100	90-95	60-65	30-35	10-15

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
189:												
Tipper----------	0-1	Loamy fine sand	SM	A-2, A-4	0	0	80-100	75-100	50-85	25-50	20-25	NP-5
	1-28	Loamy sand, loamy fine sand	SC-SM, SM	A-1, A-2	0	0	80-100	75-100	40-85	15-40	20-25	NP-5
	28-32	Weathered bedrock			---	---	---	---	---	---	---	---
Crustown--------	0-1	Loamy fine sand	SC-SM, SM	A-2-4	0	0	90-100	90-100	70-80	25-50	20-25	NP-5
	1-10	Loamy fine sand, fine sand	SC-SM, SM	A-2-4	0	0	90-100	90-100	70-80	20-50	20-25	NP-5
	10-14	Weathered bedrock			---	---	---	---	---	---	---	---
190:												
Tipperary-------	0-3	Sand	SM, SP-SM	A-1, A-2, A-3	0	0	85-100	80-100	40-70	5-15	---	NP
	3-60	Sand, loamy sand, loamy fine sand	SM, SP-SM	A-2, A-3	0	0	85-100	80-100	40-80	5-50	---	NP
191:												
Tipperary-------	0-3	Loamy fine sand	SM	A-2	0	0	90-100	90-100	50-85	20-40	---	NP
	3-60	Loamy fine sand, loamy sand, fine sand	SM, SP-SM	A-2, A-3	0	0	85-100	80-100	40-80	5-50	---	NP
192:												
Tipperary-------	0-3	Loamy fine sand	SM	A-2	0	0	90-100	90-100	50-85	20-40	---	NP
	3-60	Loamy fine sand, loamy sand, fine sand	SM, SP-SM	A-2, A-3	0	0	85-100	80-100	40-80	5-50	---	NP
Willwood--------	0-16	Loamy fine sand	SM	A-2	0	0-10	85-95	80-95	50-85	25-50	20-25	NP-5
	16-60	Extremely channery loamy fine sand, very channery loamy fine sand	GM, GP-GM	A-1	0	0-15	10-40	10-35	5-35	5-20	20-25	NP-5

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
193:												
Tisworth--------	0-3	Fine sandy loam	SC, SC-SM	A-4	0	0	100	95-100	70-85	40-55	25-30	5-10
	3-18	Clay loam, sandy clay loam, loam	CL	A-6	0	0	100	95-100	85-100	60-75	30-35	10-15
	18-60	Stratified fine sandy loam to clay loam	CL-ML, SC-SM	A-4	0	0	80-100	80-100	80-100	40-70	20-30	5-10
194:												
Tolman----------	0-6	Very stony fine sandy loam	SC, SC-SM	A-2	25-30	20-25	45-90	40-80	30-65	20-45	25-30	5-10
	6-15	Extremely stony sandy clay loam, very stony sandy clay loam	GC, GC-GM, SC, SC-SM	A-1, A-2, A-4	25-35	20-30	45-85	40-75	30-70	15-40	25-30	5-10
	15-19	Unweathered bedrock			---	---	---	---	---	---	---	---
Duffymont-------	0-4	Very stony fine sandy loam	GC, GC-GM, SC-SM	A-2	30-50	20-30	60-75	60-75	50-70	25-35	25-30	5-10
	4-11	Extremely stony fine sandy loam, extremely flaggy fine sandy loam	GC, GC-GM, SC-SM	A-2	30-50	20-30	60-75	60-75	50-70	25-35	25-30	5-10
	11-15	Unweathered bedrock			---	---	---	---	---	---	---	---
195:												
Torriorthents---	0-8	Stony loam	CL, CL-ML, SC, SC-SM	A-4, A-6	10-45	5-15	75-95	70-90	60-80	35-70	20-30	5-15
	8-12	Weathered bedrock			---	---	---	---	---	---	---	---
196:												
Torriorthents---	0-8	Stony loam	CL, CL-ML, SC, SC-SM	A-4, A-6	10-45	5-15	75-95	70-90	60-80	35-70	20-30	5-15
	8-12	Weathered bedrock			---	---	---	---	---	---	---	---

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
196:												
Baston----------	0-1	Sandy loam	SC, SC-SM	A-2, A-4	0	0	95-100	90-100	60-70	30-40	25-30	5-10
	1-28	Silty clay, silty clay loam, clay loam	CL	A-7	0	0	95-100	90-100	75-95	70-95	40-50	20-30
	28-32	Weathered bedrock			---	---	---	---	---	---	---	---
197:												
Torriorthents---	0-2	Channery sandy loam	GC, GC-GM, SC, SC-SM	A-1, A-2-4	0-10	10-25	55-80	55-75	35-50	20-30	25-30	5-10
	2-14	Channery clay loam, very channery sandy loam	GC, GC-GM	A-1, A-2-4	10-30	10-40	55-65	50-65	35-55	20-45	25-30	5-10
	14-18	Unweathered bedrock			---	---	---	---	---	---	---	---
Rock outcrop, sandstone------	0-60	Unweathered bedrock			---	---	---	---	---	---	0-14	---
198:												
Torriorthents---	0-8	Silty clay loam	ML	A-6, A-7	0	0	100	100	95-100	80-95	30-50	5-20
	8-12	Weathered bedrock			---	---	---	---	---	---	---	---
Rock outcrop, shale----------	0-60	Unweathered bedrock			---	---	---	---	---	---	0-14	---
199:												
Torriorthents---	0-2	Clay loam	CL	A-6	0	0	95-100	90-100	85-95	70-80	30-40	10-20
	2-15	Clay, sandy loam	CL, CL-ML, SC, SC-SM	A-4, A-6	0	0	95-100	90-100	65-95	30-90	25-40	5-20
	15-19	Weathered bedrock			---	---	---	---	---	---	---	---
Torripsamments--	0-4	Sand	SM, SP-SM, SW-SM	A-2, A-3	0	0-10	90-100	80-100	50-75	5-30	---	NP
	4-26	Loamy sand, sand, gravelly sand	SC-SM, SM, SP-SM	A-2, A-3	0	0-10	70-90	65-85	35-60	5-25	15-20	NP-5
	26-30	Unweathered bedrock			---	---	---	---	---	---	---	---

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
200:												
Tresano	0-8	Sandy loam	SC-SM	A-4	0	0	95-100	95-100	60-70	30-40	25-30	5-10
	8-30	Sandy clay loam, clay loam, loam	CL	A-4	0	0	95-100	95-100	85-95	60-80	25-30	5-10
	30-60	Sandy loam, sandy clay loam, loam	CL-ML, SC-SM	A-4	0	0	95-100	95-100	60-85	30-55	25-30	5-10
201:												
Tresano	0-2	Loam	CL-ML	A-4	0	0	95-100	95-100	90-95	60-70	25-30	5-10
	2-28	Clay loam, sandy clay loam, loam	CL	A-4	0	0	95-100	95-100	85-95	60-80	25-30	5-10
	28-60	Loam, sandy clay loam, sandy loam	CL-ML, SC-SM	A-4	0	0	95-100	95-100	60-85	30-55	25-30	5-10
Hiatha	0-2	Silty clay	MH, ML	A-7	0	0	95-100	95-100	95-100	85-95	45-55	15-25
	2-14	Silty clay, clay	MH, ML	A-7	0	0	95-100	95-100	95-100	85-95	45-55	15-25
	14-18	Weathered bedrock			---	---	---	---	---	---	---	---
Kandaly	0-3	Loamy sand	SM	A-2	0	0	100	100	50-95	15-30	---	NP
	3-60	Loamy sand, fine sand	SM	A-2	0	0	100	100	50-90	15-30	---	NP
202:												
Turzo	0-4	Loam	CL-ML	A-4	0	0	95-100	95-100	90-95	70-80	25-30	5-10
	4-23	Loam, clay loam	CL, CL-ML	A-4, A-6	0	0	95-100	95-100	90-95	70-80	25-35	5-15
	23-60	Loam, clay loam	CL, CL-ML	A-4, A-6	0	0	95-100	95-100	90-95	70-80	25-35	5-15
203:												
Turzo, saline	0-3	Loam	CL, CL-ML	A-4	0	0	95-100	90-100	80-95	65-80	25-30	5-10
	3-18	Loam, clay loam	CL, CL-ML	A-4	0	0	95-100	90-100	80-95	65-80	25-30	5-10
	18-34	Clay loam, loam	CL, CL-ML	A-4	0	0	95-100	90-100	80-95	65-80	25-30	5-10
	34-60	Loam, clay loam, sandy clay loam	CL, CL-ML, SC, SC-SM	A-4	0	0	95-100	90-100	80-95	40-80	25-30	5-10

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
204:												
Typic Natrargids-----	0-2	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	100	95-100	70-85	40-55	20-25	NP-5
	2-18	Sandy clay loam, clay loam, clay	CL, SC	A-6, A-7	0	0	100	95-100	75-100	45-95	30-45	10-20
	18-35	Sandy clay loam, clay loam, clay	CL, SC	A-6, A-7	0	0	100	95-100	75-100	45-95	30-45	10-20
	35-60	Silty clay loam	ML	A-4, A-7-5	0	0	100	100	80-100	75-95	30-50	10-15
205:												
Uffens----------	0-4	Fine sandy loam	CL, CL-ML, SC, SC-SM	A-4	0	0	95-100	95-100	70-85	40-55	20-30	5-10
	4-12	Clay loam, sandy clay loam	CL, SC	A-6	0	0	95-100	95-100	85-95	35-80	30-40	10-20
	12-37	Stratified loamy fine sand to loam	CL, CL-ML, SC, SC-SM	A-2, A-4	0	0	95-100	95-100	70-95	30-75	25-30	5-10
	37-60	Sand, loamy fine sand, fine sandy loam	SM	A-2, A-4	0	0	95-100	95-100	50-85	5-50	---	NP
206:												
Ustorthents, frigid---------	0-3	Very channery sandy loam	GC, GC-GM	A-1, A-2	5-25	0-30	30-55	30-50	20-35	10-20	25-30	5-10
	3-28	Extremely channery sandy loam, channery clay loam, very channery loam	GC, GC-GM, SC, SC-SM	A-2-4, A-4, A-6	10-40	25-60	45-70	40-65	30-60	15-50	20-40	5-20
	28-32	Unweathered bedrock			---	---	---	---	---	---	---	---

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
206:												
Borolls---------	0-19	Loam	CL, CL-ML	A-4	0	0	95-100	95-100	85-95	60-75	25-30	5-10
	19-30	Cobbly sandy clay loam, extremely stony sandy loam, channery sandy clay loam, clay loam	CL, CL-ML, SC, SC-SM	A-1, A-4, A-6	0-65	0-65	25-100	20-100	15-95	10-80	25-35	5-15
	30-34	Unweathered bedrock			---	---	---	---	---	---	---	---
207:												
Vermillion------	0-3	Loam	CL, CL-ML	A-4	0	0	95-100	95-100	80-90	60-70	25-30	5-10
	3-23	Channery loam, channery clay loam	GC, GC-GM, SC, SC-SM	A-4	0	0-10	70-85	55-75	50-65	35-50	25-30	5-10
	23-28	Extremely cobbly loam, extremely cobbly clay loam, very cobbly loam	SC, SC-SM	A-2	5-10	35-65	50-85	40-50	30-40	20-35	25-30	5-10
	28-32	Unweathered bedrock			---	---	---	---	---	---	---	---
Langspring------	0-3	Loam	CL, CL-ML	A-4	0	0	95-100	85-100	80-95	60-75	25-30	5-10
	3-17	Sandy clay loam, loam, sandy loam	CL	A-6	0	0	80-100	75-100	65-85	50-75	25-30	10-15
	17-60	Sandy clay loam, loam, sandy loam, fine sandy loam	CL	A-6	0	0	85-100	80-100	70-85	50-70	25-30	10-15

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
208:												
Wallson---	0-3	Fine sandy loam	SC-SM, SM	A-4	0	0	100	100	70-85	40-55	20-25	NP-5
	3-38	Fine sandy loam, sandy loam	SC, SC-SM	A-2-4, A-4	0	0	100	100	60-85	30-55	25-30	5-10
	38-48	Fine sandy loam, loamy fine sand, sand	SC-SM, SM	A-2-4	0	0	100	100	50-85	10-45	20-25	NP-5
	48-60	Sandy clay loam, fine sandy loam	CL, CL-ML, ML, SC-SM	A-4	0	0	100	100	70-90	35-55	20-30	NP-10
Tricera---	0-4	Loamy fine sand	SM	A-2	0	0	100	100	90-95	25-35	15-25	NP-5
	4-47	Loamy fine sand, loamy sand, sand	SM	A-2	0	0	100	100	80-95	15-35	15-25	NP-5
	47-60	Fine sand, sand	SM	A-2	0	0	100	100	80-95	15-20	---	NP
209:												
Weed---	0-10	Sandy loam	SC, SC-SM	A-4	0	0	95-100	95-100	80-90	35-45	25-30	5-10
	10-28	Sandy clay loam, clay loam	CL, CL-ML	A-4	0	0	95-100	95-100	80-95	50-65	25-30	5-10
	28-41	Sandy clay loam	CL-ML, SC-SM	A-4	0	0	95-100	95-100	80-90	45-55	25-30	5-10
	41-60	Sandy loam, loamy sand	SC, SC-SM	A-2, A-4	0	0	95-100	95-100	80-90	25-45	25-30	5-10
210:												
Willwood---	0-8	Loamy sand	SC-SM, SM	A-2	0	0-10	90-100	85-100	40-75	15-30	20-25	NP-5
	8-60	Extremely cobbly sand, very cobbly sand, extremely cobbly loamy sand	GM, GP-GM, SM, SP-SM	A-1	0-20	35-65	40-75	30-65	25-50	5-15	---	NP
Sheppard, cool---	0-4	Loamy fine sand	SC-SM, SM	A-2-4	0	0	90-100	90-100	75-90	30-50	20-25	NP-5
	4-60	Loamy fine sand, loamy sand	SM, SC-SM	A-2-4	0	0	90-100	85-100	60-90	20-40	20-25	NP-5

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
211:												
Willwood--------	0-2	Very cobbly loamy fine sand	GM, SM	A-1	0-5	20-50	45-90	40-85	30-70	15-30	20-25	NP-5
	2-11	Very gravelly loamy fine sand	GC-GM, GM, GP-GM	A-1-a, A-1-b	0-15	0-20	35-55	30-50	25-45	10-25	20-25	NP-5
	11-60	Extremely cobbly sand, very cobbly sand, extremely cobbly loamy sand	GM, GP-GM, SM, SP-SM	A-1	0-20	35-65	40-75	30-65	25-50	5-15	---	NP
Tipperary-------	0-3	Loamy fine sand	SM	A-2	0	0	90-100	90-100	50-85	20-40	---	NP
	3-60	Loamy fine sand, fine sand, loamy sand, sand	SM, SP-SM	A-2, A-3	0	0	85-100	80-100	40-80	5-50	---	NP
212:												
Willwood--------	0-10	Loamy fine sand	SC-SM, SM	A-2	0	0-10	90-100	85-100	50-85	25-50	20-25	NP-5
	10-60	Extremely cobbly sand, very cobbly sand, extremely cobbly loamy sand	GM, GP-GM, SM, SP-SM	A-1	0-20	35-65	40-75	30-65	25-50	5-15	---	NP
Tipperary, cobbly substratum-----	0-4	Loamy fine sand	SM	A-2	0	0	95-100	95-100	85-95	25-35	20-25	NP-5
	4-36	Loamy fine sand	SM	A-2	0	0	95-100	95-100	85-95	25-35	20-25	NP-5
	36-60	Extremely gravelly sand, very cobbly sand	GP, GP-GM, SP, SP-SM	A-1	0-5	25-55	40-60	30-50	15-30	0-10	---	NP
213:												
Winevada--------	0-10	Loam	CL, CL-ML	A-4	0	0	95-100	95-100	90-95	60-75	25-30	5-10
	10-25	Loam, sandy clay loam	CL, CL-ML	A-4	0-5	0-10	90-100	90-100	90-95	50-70	25-30	5-10
	25-29	Unweathered bedrock			---	---	---	---	---	---	---	---

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
213:												
Splitro---------	0-1	Slightly decomposed plant material	PT		0	0	100	100	---	---	---	---
	1-12	Fine sandy loam	SC, SC-SM	A-4	0	0	90-100	90-100	85-95	35-45	25-30	5-10
	12-14	Fine sandy loam, gravelly fine sandy loam, cobbly sandy loam	GC-GM, SC, SC-SM	A-2, A-4	0	5-15	60-95	55-90	40-85	25-40	25-30	5-10
	14-17	Unweathered bedrock			---	---	---	---	---	---	---	---
214:												
Winevada--------	0-1	Slightly decomposed plant material	PT		0	0	100	100	---	---	---	---
	1-11	Loam	CL, CL-ML	A-4	0	0	95-100	95-100	90-95	60-75	25-30	5-10
	11-26	Loam, sandy clay loam	CL, CL-ML	A-4	0-5	0-10	90-100	90-100	90-95	50-70	25-30	5-10
	26-29	Unweathered bedrock			---	---	---	---	---	---	---	---
Splitro---------	0-1	Slightly decomposed plant material	PT		0	0	100	100	---	---	---	---
	1-12	Fine sandy loam	SC, SC-SM	A-4	0	0	90-100	90-100	85-95	35-45	25-30	5-10
	12-14	Fine sandy loam, gravelly fine sandy loam, cobbly sandy loam	GC-GM, SC, SC-SM	A-2, A-4	0	5-15	60-95	55-90	40-85	25-40	25-30	5-10
	14-17	Unweathered bedrock			---	---	---	---	---	---	---	---
215:												
Winkleman-------	0-6	Clay loam	CL	A-6	0	0	95-100	95-100	85-90	70-75	30-40	10-20
	6-60	Stratified loam to clay loam	CL	A-6, A-7	0	0	95-100	95-100	85-95	75-90	35-45	15-20
216:												
Yamo------------	0-5	Loam	CL, CL-ML	A-4	0	0	95-100	95-100	90-95	65-75	15-25	5-10
	5-22	Loam, clay loam	CL, CL-ML	A-4, A-6	0	0	95-100	95-100	90-95	65-80	20-30	5-15
	22-60	Loam	CL, CL-ML	A-4	0	0	95-100	95-100	90-95	65-75	15-25	5-10

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
217:												
Yamo----------	0-5	Loam	CL, CL-ML	A-4	0	0	95-100	95-100	90-95	65-75	15-25	5-10
	5-22	Loam, clay loam	CL, CL-ML	A-4, A-6	0	0	95-100	95-100	90-95	65-80	20-30	5-15
	22-60	Loam	CL, CL-ML	A-4	0	0	95-100	95-100	90-95	65-75	15-25	5-10
218:												
Yellowwash------	0-2	Channery loam	GC-GM, SC-SM, SM	A-2-4, A-4	0	0-5	60-80	50-75	45-70	30-50	25-35	5-10
	2-10	Channery loam, loam	CL-ML, GC-GM, SC-SM	A-2-4, A-4	0	5-25	60-85	50-80	45-75	30-60	25-35	5-10
	10-14	Unweathered bedrock			---	---	---	---	---	---	---	---
Piezon----------	0-4	Loam	CL, CL-ML	A-4	0	0	100	100	95-100	60-75	25-35	5-10
	4-30	Loam	CL, CL-ML	A-4	0	0	95-100	95-100	95-100	65-75	25-35	5-10
	30-34	Weathered bedrock			---	---	---	---	---	---	---	---
219:												
Youga-----------	0-13	Loam	CL, CL-ML	A-4	0	0	90-100	85-90	80-85	50-55	20-25	5-10
	13-39	Clay loam	CL	A-6	0	0	90-100	80-90	75-85	65-75	30-40	10-20
	39-60	Sandy clay loam, sandy loam	CL, CL-ML, SC, SC-SM	A-4	0	0	90-100	80-90	75-80	40-55	25-30	5-10
220:												
Youga-----------	0-12	Fine sandy loam	SC, SC-SM	A-4	0	0	100	95-100	85-95	40-50	20-25	5-10
	12-24	Sandy clay loam	CL, CL-ML, SC, SC-SM	A-4	0	0	85-100	75-100	70-90	45-60	25-35	5-10
	24-36	Fine sandy loam, sandy clay loam	CL, CL-ML, SC, SC-SM	A-4	0	0	85-100	75-100	70-95	40-55	20-30	5-10
	36-60	Fine sandy loam	SC, SC-SM	A-4	0	0	85-100	75-100	70-90	35-45	20-25	5-10
Dinnen----------	0-10	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	95-100	90-95	40-60	20-25	NP-5
	10-20	Fine sandy loam	SC-SM, SC	A-4	0	0	95-100	95-100	80-95	40-50	25-30	5-10
	20-41	Gravelly fine sandy loam, fine sandy loam	SC, SC-SM	A-4	0	0	95-100	90-100	75-85	30-50	25-30	5-10
	41-60	Fine sandy loam, gravelly fine sandy loam	SC, SC-SM	A-4	0	0	95-100	90-100	75-85	30-50	20-25	5-10

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
221:												
Youga	0-10	Stony fine sandy loam	SC, SC-SM	A-4	15-25	5-15	85-95	75-90	70-80	35-45	25-30	5-10
	10-42	Sandy clay loam	CL, CL-ML, SC, SC-SM	A-4	0	0	85-100	75-100	70-90	45-60	25-35	5-10
	42-60	Fine sandy loam	SC, SC-SM	A-4	0	0	85-100	75-100	70-90	35-45	20-25	5-10
Gelkie	0-2	Very bouldery fine sandy loam	GC, GC-GM, SC, SC-SM	A-2-4	25-35	10-20	65-75	60-70	30-65	25-40	25-30	5-10
	2-10	Bouldery sandy clay loam	SC, SC-SM	A-4	10-20	10-20	85-95	80-90	75-90	40-55	25-30	5-10
	10-22	Sandy clay loam	CL, SC	A-6	0-5	0-5	90-100	85-95	80-90	45-60	30-40	10-20
	22-50	Sandy clay loam, fine sandy loam	CL, CL-ML, SC, SC-SM	A-4	0	0	95-100	95-100	90-95	40-55	25-30	5-10
	50-60	Fine sandy loam	SC, SC-SM	A-4	0	0	95-100	95-100	90-95	35-50	25-30	5-10
Clayburn, warm	0-2	Slightly decomposed plant material	PT		0	0	100	100	---	---	---	---
	2-16	Fine sandy loam	SC, SC-SM	A-4	0-5	0-5	85-100	85-100	55-85	35-55	25-30	5-10
	16-39	Sandy clay loam	CL, CL-ML, SC, SC-SM	A-4	0	0-5	85-100	85-100	70-90	35-55	25-30	5-10
	39-60	Fine sandy loam	SC, SC-SM	A-4	0	0	85-100	85-100	70-85	40-55	25-30	5-10
222:												
Youngston, cool	0-9	Loam	CL-ML	A-4	0	0	90-100	90-100	70-90	40-65	25-30	5-10
	9-60	Stratified silt loam to clay loam	CL, CL-ML	A-4	0	0	90-100	90-100	75-90	55-80	25-30	5-10
223:												
Youngston, well drained	0-3	Loam	CL, CL-ML	A-4	0	0	100	100	70-80	60-75	25-30	5-10
	3-60	Stratified very fine sandy loam to clay loam	CL	A-6	0	0	100	100	80-100	60-80	30-40	10-20

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
224:												
Zillion---------	0-7	Loam	CL, CL-ML	A-4	0	5-10	85-95	80-90	75-85	60-70	15-20	5-10
	7-18	Cobbly loam	CL, CL-ML, SC, SC-SM	A-4	0-5	10-20	80-90	75-85	65-75	45-55	15-20	5-10
	18-26	Very cobbly loam, extremely cobbly sandy clay loam	GC	A-2, A-6	0-15	30-45	50-60	45-55	40-50	30-45	25-35	10-15
	26-60	Extremely cobbly sandy clay loam, very cobbly sandy clay loam	GC, GC-GM	A-1-b, A-2	15-25	25-50	40-55	35-50	30-40	10-25	20-25	5-10
Barkelew, moist----------	0-2	Very gravelly loam	GC-GM	A-2, A-4	0	25-30	50-65	40-60	30-50	20-40	20-25	5-10
	2-7	Cobbly loam	CL, CL-ML, SC, SC-SM	A-4	0	15-45	75-80	70-80	60-80	45-65	25-30	5-10
	7-16	Very cobbly clay loam	CL, GC	A-6	0	30-45	60-75	50-65	40-60	35-55	30-35	10-15
	16-34	Very cobbly clay loam	GC	A-2, A-6	0	40-45	55-70	45-60	35-55	30-50	30-35	10-15
	34-60	Very cobbly sandy clay loam	GC, GC-GM	A-2, A-4	0	20-45	55-70	45-60	30-55	20-50	20-30	5-10
Grapit----------	0-9	Channery loam	GC, GC-GM, SC, SC-SM	A-4	0-5	5-15	55-80	55-75	50-70	35-55	25-30	5-10
	9-36	Very channery loam, very gravelly clay loam, very channery clay loam	GC, GC-GM	A-2, A-4	5-15	10-25	30-55	30-50	25-50	20-40	25-30	5-10
	36-60	Extremely channery loam, very channery clay loam, extremely gravelly sandy clay loam	GC, GC-GM	A-1, A-2	5-15	10-25	30-55	20-50	15-45	10-35	20-30	NP-10

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
225:												
Abracon---	0-4	Loam	CL-ML	A-4	0	0	85-100	80-100	65-95	50-75	20-30	5-10
	4-10	Loam	CL-ML, ML	A-4	0	0	90-100	85-100	70-95	55-75	20-30	NP-10
	10-51	Loam, clay loam	CL-ML, ML	A-4	0	0	85-100	80-100	65-100	50-80	20-30	NP-10
	51-60	Loam	CL-ML, ML	A-4	0	0-10	90-100	85-100	70-95	55-75	20-30	NP-10
Solirec---	0-4	Fine sandy loam	CL-ML, SC-SM	A-4	0	0	100	100	70-85	40-55	20-30	5-10
	4-12	Sandy clay loam	CL-ML, SC-SM	A-4	0	0	100	100	80-90	35-55	20-30	5-10
	12-19	Loam	CL-ML	A-4	0	0	100	100	85-95	60-75	20-30	5-10
	19-75	Clay loam	CL-ML	A-4	0	0	100	95-100	85-100	65-80	20-30	5-10
226:												
Arches---	0-2	Loamy fine sand	SM	A-2, A-4	0	0	100	100	80-90	30-50	0-14	NP
	2-5	Loamy fine sand	SM	A-2, A-4	0	0	100	100	80-90	30-50	0-14	NP
	5-9	Fine sand	SM	A-2	0	0	90-100	85-95	65-75	20-30	0-14	NP
	9-13	Unweathered bedrock			---	---	---	---	---	---	---	---
Mespun---	0-3	Fine sand	SM	A-2	0	0	100	100	65-80	20-35	0-14	NP
	3-60	Fine sand, loamy fine sand	SM	A-2	0	0	100	100	70-80	20-35	0-14	NP
Rock outcrop---	0-60	Unweathered bedrock			---	---	---	---	---	---	---	---
227:												
Bankard family---	0-2	Sand	SM, SW-SM	A-2-4, A-3	0	0	100	100	50-70	5-15	---	NP
	2-60	Sand, loamy sand, loamy fine sand	SM, SP-SM, SW-SM	A-2-4, A-3, A-4	0	0	100	100	50-85	5-50	---	NP
Cameo---	0-2	Loamy fine sand	SM	A-2-4, A-4	0	0	100	100	70-85	30-50	---	NP
	2-60	Fine sandy loam, silt loam, loam	CL-ML, ML, SC-SM, SM	A-4	0	0	100	100	70-95	40-75	20-25	NP-5
228:												
Bondman---	0-2	Sandy loam	SC, SC-SM	A-2-4, A-4	0	0	100	100	60-70	30-40	25-30	5-10
	2-8	Sandy clay loam, loam	CL, CL-ML, SC, SC-SM	A-4, A-6	0	0	100	100	80-95	35-75	25-35	5-15
	8-12	Unweathered bedrock			---	---	---	---	---	---	---	---

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
228:												
Rock outcrop----	0-60	Unweathered bedrock			---	---	---	---	---	---	---	---
229:												
Cameo----------	0-2	Loamy fine sand	SM	A-2-4, A-4	0	0	100	100	70-85	30-50	---	NP
	2-60	Fine sandy loam, silt loam, loam	CL-ML, ML, SC-SM, SM	A-4	0	0	100	100	70-95	40-75	20-25	NP-5
230:												
Cragnot---------	0-3	Very channery loam	GC-GM, GM	A-1-b, A-2-4, A-4	0-25	0-30	30-55	30-50	25-50	20-40	20-25	NP-5
	3-12	Very channery silt loam, very channery loam, very channery clay loam	GC-GM, GM, GC	A-1-b, A-2-4, A-4	0-25	0-30	30-55	30-50	30-50	20-45	20-30	NP-10
	12-38	Extremely channery silt loam, extremely channery loam, extremely channery clay loam	GC, GC-GM, GM, GW-GM	A-1-a, A-1-b, A-2-4	0-30	0-40	10-30	10-25	10-25	5-20	20-30	NP-10
	38-60	Very channery silt loam, very channery sandy loam, very channery clay loam	GC, GC-GM, GM, GW-GM	A-1-a, A-1-b, A-2-4	0-25	0-30	30-55	30-50	20-50	10-40	20-30	NP-10

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
230:												
Pensore	0-3	Gravelly loam	GM, ML, SC-SM, SM	A-4	0-10	0-15	60-80	55-75	50-70	35-55	20-25	NP-5
	3-10	Extremely cobbly loam, extremely cobbly fine sandy loam	CL, GM, ML, SC	A-1, A-2, A-3, A-4	0-30	30-85	20-80	15-75	10-70	5-55	20-30	NP-10
	10-16	Extremely channery loam, extremely channery fine sandy loam, extremely channery sandy loam	GC-GM, GM, GW, GW-GM	A-1-a, A-1-b	0-30	0-40	10-30	10-25	5-25	0-20	20-25	NP-5
	16-20	Unweathered bedrock			---	---	---	---	---	---	---	---
Grapit	0-5	Gravelly loam	CL, GC, SC	A-4	0-5	5-15	60-80	60-75	50-70	35-55	25-30	5-10
	5-14	Very gravelly loam	GC, GC-GM	A-1, A-2, A-4	5-15	5-20	35-55	30-50	25-50	20-40	25-30	5-10
	14-30	Extremely gravelly loam	GC, GC-GM, GW-GC	A-1, A-2	5-20	5-25	15-30	10-25	10-25	5-20	25-30	5-10
	30-54	Extremely cobbly loam	CL, GC, SC	A-4, A-1, A-2	5-20	30-85	20-80	15-75	15-70	10-55	25-30	5-10
	54-60	Very cobbly loam	GM, ML, SM	A-2, A-4	0-15	30-60	45-90	40-85	35-85	25-65	20-25	NP-5
231:												
Green River	0-5	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	100	100	70-85	40-55	20-30	NP-10
	5-60	Stratified coarse sand to loam	SC, SC-SM, SM	A-2, A-4	0	0	100	95-100	60-80	25-50	20-30	NP-10
Fluvaquents	0-5	Fine sand	SC-SM, SM	A-2-4	0	0	100	100	65-80	20-35	20-25	NP-5
	5-60	Sand, fine sandy loam, loam	CL, ML, SC, SM	A-2-4, A-3, A-4	0	0	100	100	50-95	5-75	20-30	NP-10

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
232:												
Lakebench-------	0-3	Loamy fine sand	SC-SM, SM	A-2, A-4	0	0	100	100	70-85	30-50	20-25	NP-5
	3-9	Loam	CL-ML, ML	A-4	0	0	100	100	85-95	60-75	20-25	NP-5
	9-45	Loam	CL-ML, ML	A-4	0	0	100	100	85-95	60-75	20-25	NP-5
	45-50	Gravelly loam	ML, SM	A-4	0-10	0-15	60-80	55-75	50-70	35-55	20-25	NP-5
	50-60	Loam	CL-ML, ML	A-4	0	0	100	100	85-95	60-75	20-25	NP-5
Strell----------	0-3	Loamy fine sand	SM	A-2-4, A-4	0	0	100	100	70-85	30-50	---	NP
	3-13	Sand, loamy sand, loamy fine sand	SM	A-2-4, A-4	0	0	100	100	65-85	20-50	---	NP
	13-17	Unweathered bedrock			---	---	---	---	---	---	---	---
233:												
Lakebench-------	0-3	Silt loam	ML	A-4	0	0	85-100	80-100	75-100	55-90	25-30	NP-5
	3-9	Loam	CL-ML, ML	A-4	0	0	100	100	85-95	60-75	20-25	NP-5
	9-45	Loam	CL-ML, ML	A-4	0	0	100	100	85-95	60-75	20-25	NP-5
	45-50	Gravelly loam	ML, SM	A-4	0-10	0-15	60-80	55-75	50-70	35-55	20-25	NP-5
	50-60	Loam	CL-ML, ML	A-4	0	0	100	100	85-95	60-75	20-25	NP-5
Yampa-----------	0-7	Very cobbly loam	GC-GM, GM, ML, SC-SM	A-2, A-4	0-25	20-70	45-90	40-85	35-80	25-65	20-25	NP-5
	7-13	Extremely gravelly loam	GM, GW-GM	A-1	0-30	0-35	15-30	10-25	10-25	5-20	20-25	NP-5
	13-31	Very cobbly loam, very cobbly clay loam	CL, GC, SC	A-2, A-4	0-25	20-70	45-90	45-85	35-85	25-70	25-30	5-10
	31-60	Extremely cobbly sandy loam, extremely gravelly loamy sand, extremely gravelly sandy loam	GP, GP-GM, GW, GW-GM	A-1, A-2	0-30	0-85	15-80	10-75	5-50	0-30	20-25	NP-3

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
234:												
Mantlemine------	0-5	Loam	CL, CL-ML	A-4	0	0	100	100	70-85	40-55	25-30	5-10
	5-20	Clay loam, loam, silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	90-100	70-90	25-35	5-15
	20-25	Clay loam, loam, silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	90-100	70-90	25-35	5-15
	25-45	Clay loam, loam	CL, CL-ML	A-4	0	0	100	100	85-100	60-80	25-30	5-10
	45-60	Loam, silt loam	CL, CL-ML	A-4	0	0	100	100	85-100	60-90	25-30	5-10
235:												
Mantlemine------	0-5	Loam	CL, CL-ML	A-4	0	0	100	100	70-85	40-55	25-30	5-10
	5-20	Clay loam, loam, silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	90-100	70-90	25-35	5-15
	20-25	Clay loam, loam, silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	90-100	70-90	25-35	5-15
	25-45	Loam, clay loam	CL, CL-ML	A-4	0	0	100	100	85-100	60-80	25-30	5-10
	45-60	Loam, silt loam	CL, CL-ML	A-4	0	0	100	100	85-100	60-90	25-30	5-10
Emlin-----------	0-11	Loam	CL, CL-ML	A-4	0	0-5	90-100	85-100	70-95	60-70	25-30	5-10
	11-19	Clay loam	CL	A-6	0	0-5	95-100	90-100	85-100	70-80	30-35	10-15
	19-60	Silty clay loam	ML	A-4, A-6, A-7	0	0-10	95-100	90-100	80-100	70-95	30-45	5-15
236:												
Mido------------	0-8	Loamy fine sand	SC-SM, SM	A-2, A-4	0	0	100	100	70-85	30-50	20-25	NP-5
	8-60	Loamy fine sand	SC-SM, SM	A-2, A-4	0	0	100	100	70-85	30-50	20-25	NP-5
237:												
Mikim loam-----	0-6	Loam	CL, CL-ML	A-4, A-6	0	0	100	100	85-100	60-80	25-35	5-15
	6-60	Loam, clay loam	CL, CL-ML	A-4, A-6	0	0	85-100	80-100	65-100	50-80	25-40	5-20
Mikim silt loam-----------	0-6	Silt loam	CL, CL-ML	A-4	0	0	100	100	90-100	70-90	25-30	5-10
	6-60	Stratified sandy loam to clay loam	CL, CL-ML, SC, SC-SM	A-4, A-6	0	0	100	100	80-95	40-75	25-40	5-15

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
238:												
Milok----------	0-4	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-2, A-4	0	0	95-100	90-100	55-85	30-55	20-30	NP-10
	4-15	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-2, A-4	0	0	95-100	90-100	55-85	30-55	20-30	NP-10
	15-37	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-2, A-4	0	0	95-100	90-100	55-85	30-55	20-30	NP-10
	37-50	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-2, A-4	0	0	95-100	90-100	55-85	30-55	20-30	NP-10
	50-60	Sandy loam	SC-SM, SM	A-2, A-4	0	0	95-100	90-100	45-70	25-40	20-30	NP-10
239:												
Milok----------	0-4	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-2, A-4	0	0	95-100	90-100	55-85	30-55	20-30	NP-10
	4-15	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-2, A-4	0	0	95-100	90-100	55-85	30-55	20-30	NP-10
	15-37	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-2, A-4	0	0	95-100	90-100	55-85	30-55	20-30	NP-10
	37-50	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-2, A-4	0	0	95-100	90-100	55-85	30-55	20-30	NP-10
	50-60	Sandy loam	SC-SM, SM	A-2, A-4	0	0	95-100	90-100	45-70	25-40	20-30	NP-10
Solirec---------	0-8	Loam	CL, CL-ML, ML	A-4	0	0	100	100	85-95	60-75	20-30	NP-10
	8-52	Clay loam, loam	CL, CL-ML	A-4	0	0	100	100	85-100	60-80	25-30	5-10
	52-60	Clay loam, loam, fine sandy loam	SM, CL, ML, SC	A-4	0	0	100	100	70-100	40-80	20-30	NP-10
Strych----------	0-5	Cobbly loam	CL, ML, SC, SM	A-4	0-10	15-45	75-90	70-85	60-80	45-65	20-30	NP-10
	5-10	Cobbly loam, cobbly sandy loam	CL, ML, SC, SM	A-2-4, A-4	0-10	15-45	75-90	70-85	45-80	25-65	20-30	NP-10
	10-34	Very stony loam, very stony sandy loam	CL, GM, ML, SC	A-1-b, A-2-4, A-4	25-70	0-50	45-90	40-85	25-80	15-65	20-30	NP-10
	34-50	Very cobbly loam, very cobbly sandy loam	CL, GM, ML, SM	A-1-b, A-2-4, A-4	0-25	20-70	45-90	40-85	25-80	15-65	20-30	NP-10
	50-60	Loam, loamy fine sand	CL, ML, SC, SM	A-2-4, A-4	0	0	100	100	70-95	30-75	20-30	NP-10

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
240:												
Milok----------	0-6	Fine sandy loam	ML, SM	A-4	0	0	100	100	70-85	40-55	20-25	NP-5
	6-12	Loam	CL-ML, ML	A-4	0	0	100	100	85-95	60-75	20-30	NP-10
	12-37	Loam	CL-ML, ML	A-4	0	0	100	100	85-95	60-75	20-30	NP-10
	37-44	Silt loam	CL-ML, ML	A-4	0	0	100	100	90-100	70-90	20-30	NP-10
	44-60	Loam	CL-ML, ML	A-4	0	0	100	100	85-95	60-75	20-30	NP-10
Strych----------	0-8	Very cobbly fine sandy loam	GM	A-1, A-2	0-10	25-35	55-60	50-55	35-45	20-30	20-25	NP-5
	8-39	Extremely cobbly sandy loam	GM, GW-GM	A-1	0-10	35-50	30-40	25-35	10-20	5-15	20-25	NP-5
	39-60	Extremely cobbly loamy sand	GW, GW-GM	A-1	0-10	35-50	30-40	25-35	10-20	0-10	20-25	NP-5
241:												
Pensore---------	0-3	Gravelly loam	GM, ML, SC-SM, SM	A-4	0-10	0-15	60-80	55-75	50-70	35-55	20-25	NP-5
	3-10	Extremely cobbly loam, extremely cobbly fine sandy loam	CL, GM, ML, SC	A-1, A-2, A-3, A-4	0-30	30-85	20-80	15-75	10-70	5-55	20-30	NP-10
	10-16	Extremely channery loam, extremely channery fine sandy loam, extremely channery sandy loam	GC-GM, GM, GW, GW-GM	A-1-a, A-1-b	0-30	0-40	10-30	10-25	5-25	0-20	20-25	NP-5
	16-20	Unweathered bedrock			---	---	---	---	---	---	---	---

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
241:												
Roto----------	0-2	Very gravelly loam	GC-GM, GM	A-4, A-1-b, A-2-4	0-25	0-25	35-55	30-50	25-50	20-40	20-25	NP-5
	2-9	Very gravelly loam, very gravelly fine sandy loam, very gravelly sandy clay loam	GC, GC-GM, GM, GW-GM	A-1-a, A-1-b, A-2-4	0-25	0-25	35-55	30-50	20-45	10-30	20-30	NP-10
	9-22	Extremely gravelly sandy clay loam, extremely gravelly loam, extremely gravelly fine sandy loam	GC, GM, GW-GC, GW-GM	A-1-a, A-2-4	0-30	0-35	15-30	10-25	5-20	5-15	20-30	NP-10
	22-26	Unweathered bedrock			---	---	---	---	---	---	---	---
242:												
Riverwash-------	0-6	Sand	SP, SP-SM, SW, SW-SM	A-1, A-3	---	0-5	80-100	75-100	30-60	0-10	0-14	NP
	6-60	Stratified coarse sand to sandy loam	SM, SP, SP-SM	A-1, A-2, A-3	---	0-5	80-100	75-100	40-70	0-20	0-14	NP
243:												
Rizno----------	0-5	Cobbly fine sandy loam	SC-SM, SM	A-2-4, A-4	0-10	15-45	75-90	70-85	50-70	30-45	20-25	NP-5
	5-15	Cobbly fine sandy loam, cobbly loam	CL-ML, ML, SC-SM, SM	A-2-4, A-4	0-10	15-45	75-90	70-85	50-80	30-65	20-25	NP-5
	15-19	Unweathered bedrock			---	---	---	---	---	---	---	---
Windcomb--------	0-4	Very channery silt loam	GC-GM	A-2, A-4	0	0	35-50	30-45	25-40	25-40	25-35	5-10
	4-17	Very channery loam	GC-GM	A-2	0	0	35-50	30-45	25-40	20-30	20-30	5-10
	17-21	Unweathered bedrock			---	---	---	---	---	---	---	---

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
243:												
Anasazi---------	0-3	Fine sandy loam	CL-ML, ML, SC-SM, SM	A-4	0-20	0-20	85-100	80-100	55-85	35-55	20-25	NP-5
	3-10	Cobbly fine sandy loam, cobbly loam	CL-ML, ML, SC-SM, SM	A-2-4, A-4	0-10	15-45	75-90	70-85	50-80	30-65	20-25	NP-5
	10-19	Gravelly fine sandy loam, gravelly loam	CL-ML, GM, SC-SM, SM	A-2-4, A-4	0-10	0-15	60-80	55-75	40-70	25-55	20-25	NP-5
	19-24	Very gravelly loamy sand, very gravelly loam, very gravelly loamy fine sand	GM, GW-GM	A-1, A-2, A-4	0-25	0-25	35-55	30-50	20-50	10-40	20-25	NP-5
	24-28	Unweathered bedrock			---	---	---	---	---	---	---	---
244:												
Rock outcrop----	0-60	Unweathered bedrock			---	---	---	---	---	---	---	---
Hackling--------	0-1	Gravelly sandy loam	GC-GM, GM, SC-SM, SM	A-1, A-2-4	0-15	0-10	60-80	55-75	35-50	20-30	20-25	NP-5
	1-4	Very gravelly sandy loam	GC, GC-GM, GW-GC	A-1, A-2-4	0-10	0-15	35-55	30-50	20-35	10-20	20-25	5-10
	4-15	Extremely cobbly sandy loam	GM, GP-GM, SM, SP-SM	A-1, A-2-4	0-30	30-85	20-80	15-75	10-50	5-30	25-30	NP-5
	15-19	Unweathered bedrock			---	---	---	---	---	---	---	---
245:												
Rock outcrop----	0-60	Unweathered bedrock			---	---	---	---	---	---	---	---
Torriorthents---	0-4	Very gravelly loam	GC, GC-GM, GM, GW-GM	A-1, A-2-4, A-4, A-6	0-25	0-25	35-55	30-50	20-50	10-40	20-35	NP-15
	4-18	Very gravelly loam, very gravelly sandy loam, very gravelly clay	GC, GC-GM, GM, GW-GM	A-1, A-2-4, A-4, A-6	0-25	0-25	35-55	30-50	20-50	10-50	20-45	NP-20
	18-22	Unweathered bedrock			---	---	---	---	---	---	---	---

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
245:												
Ustorthents-----	0-6	Cobbly loam	CL, CL-ML, SC, SC-SM	A-4	0-5	15-45	75-90	70-85	60-80	45-65	25-30	5-10
	6-33	Cobbly sandy clay loam	SC, SC-SM	A-2, A-4	0-5	15-45	75-90	70-85	55-75	25-45	25-30	5-10
	33-37	Unweathered bedrock			---	---	---	---	---	---	---	---
246:												
Schoonover------	0-3	Very gravelly loam	GC, GC-GM	A-1-b, A-2-4, A-4	0-10	5-20	35-55	30-50	25-50	20-40	25-30	5-10
	3-8	Very gravelly loam	GC, GC-GM	A-1-b, A-2-4, A-4	0-10	5-20	35-55	30-50	25-50	20-40	25-30	5-10
	8-11	Very gravelly loam	GC, GC-GM	A-1-b, A-2-4, A-4	0-10	5-20	35-55	30-50	25-50	20-40	25-30	5-10
	11-14	Unweathered bedrock			---	---	---	---	---	---	---	---
Duffymont-------	0-13	Extremely flaggy fine sandy loam	GM	A-1, A-2	0-10	60-70	40-55	35-50	25-45	15-30	20-30	NP-5
	13-17	Extremely flaggy sandy loam	GC-GM, GM	A-1, A-2	0-10	60-70	40-55	35-50	20-35	15-20	20-30	NP-10
	17-21	Unweathered bedrock			---	---	---	---	---	---	---	---
247:												
Stout-----------	0-2	Sandy loam	SC-SM, SM	A-2-4, A-4	0-5	0-5	85-100	80-100	50-70	25-40	20-25	NP-5
	2-11	Sandy loam	SC-SM, SM	A-2-4, A-4	0	0-5	95-100	90-100	50-70	30-40	20-25	NP-5
	11-15	Unweathered bedrock			---	---	---	---	---	---	---	---
Rock outcrop----	0-60	Unweathered bedrock			---	---	---	---	---	---	---	---

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
248:												
Strych----------	0-5	Cobbly loam	CL, ML, SC, SM	A-4	0-10	15-45	75-90	70-85	60-80	45-65	20-30	NP-10
	5-10	Cobbly loam, cobbly sandy loam	CL, ML, SC, SM	A-2-4, A-4	0-10	15-45	75-90	70-85	45-80	25-65	20-30	NP-10
	10-34	Very stony loam, very stony sandy loam	CL, GM, ML, SC	A-1-b, A-2-4, A-4	25-70	0-50	45-90	40-85	25-80	15-65	20-30	NP-10
	34-50	Very cobbly loam, very cobbly sandy loam	CL, GM, ML, SM	A-1-b, A-2-4, A-4	0-25	20-70	45-90	40-85	25-80	15-65	20-30	NP-10
	50-60	Loam, loamy fine sand	CL, ML, SC, SM	A-2-4, A-4	0	0	100	100	70-95	30-75	20-30	NP-10
Mellenthin------	0-2	Very stony sandy loam	GC-GM, GM, SC-SM, SM	A-1-b, A-2-4	25-70	0-50	45-90	40-85	25-60	15-35	20-25	NP-5
	2-12	Very stony sandy loam, very stony fine sandy loam, very stony loam	CL-ML, GM, ML, SM	A-1-b, A-2-4, A-4	25-75	0-50	45-90	40-85	25-85	15-65	20-25	NP-5
	12-16	Unweathered bedrock			---	---	---	---	---	---	---	---
249:												
Zillion---------	0-7	Loam	CL, CL-ML	A-4	0	5-10	85-100	80-100	75-90	55-70	25-30	5-10
	7-18	Cobbly loam	CL, CL-ML	A-4	0-5	15-25	80-90	70-85	65-80	50-65	25-30	5-10
	18-26	Very cobbly loam	GC, GC-GM, SC, SC-SM	A-2, A-4	0-15	30-60	50-90	45-80	40-70	30-60	25-30	5-10
	26-34	Very cobbly sandy clay loam	GC, SC	A-2, A-6	5-25	25-60	45-85	40-80	30-75	15-45	30-35	10-15
	34-60	Extremely cobbly sandy clay loam	GC, GC-GM, SC, SP-SC	A-1, A-2, A-4	10-25	30-85	20-80	15-75	10-70	5-40	22-27	5-10

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
249:												
Yampa----------	0-7	Very cobbly loam	GC-GM, GM, ML, SC-SM	A-2, A-4	0-25	20-70	45-90	40-85	35-80	25-65	20-25	NP-5
	7-13	Extremely gravelly loam	GM, GW-GM	A-1	0-30	0-35	15-30	10-25	10-25	5-20	20-25	NP-5
	13-31	Very cobbly loam, very cobbly clay loam	CL, GC, SC	A-2, A-4	0-25	20-70	45-90	45-85	35-85	25-70	25-30	5-10
	31-60	Extremely cobbly sandy loam, extremely gravelly loamy sand, extremely gravelly sandy loam	GP, GP-GM, GW, GW-GM	A-1, A-2	0-30	0-85	15-80	10-75	5-50	0-30	20-25	NP-3
Clyl----------	0-2	Channery silt loam	GC-GM, GM	A-2, A-4	0	0-10	45-55	40-50	35-50	30-45	20-30	NP-10
	2-9	Channery silt loam	GC-GM, GM	A-4	0	0-10	60-70	55-65	45-60	35-50	20-30	NP-10
	9-19	Very channery silt loam	GC-GM, GM	A-2	0-5	5-10	40-50	35-45	25-40	20-35	25-35	5-10
	19-29	Very channery loam	GC-GM, GM	A-2	5-10	10-15	40-50	35-45	25-40	20-30	25-35	5-10
	29-60	Extremely flaggy loam	GC-GM, GM	A-2, A-4	30-35	35-40	55-65	50-60	40-55	30-45	25-35	5-10
250:												
Abracon---------	0-4	Loam	CL-ML	A-4	0	0	85-100	80-100	65-95	50-75	20-30	5-10
	4-10	Loam	CL-ML, ML	A-4	0	0	90-100	85-100	70-95	55-75	20-30	NP-10
	10-51	Loam, clay loam	CL-ML, ML	A-4	0	0	85-100	80-100	65-100	50-80	20-30	NP-10
	51-60	Loam	CL-ML, ML	A-4	0	0-10	90-100	85-100	70-95	55-75	20-30	NP-10
251:												
Badland---------	0-2	Silty clay, clay	CH, CL	A-7-6	0-10	0-25	75-100	70-100	70-100	65-95	35-55	15-40
	2-12	Weathered bedrock			---	---	---	---	---	---	---	---

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
251:												
Renegade--------	0-4	Very flaggy fine sandy loam	GC-GM, GM, SC-SM, SM	A-1, A-2, A-4	25-60	10-50	45-90	40-85	30-70	20-45	20-25	NP-5
	4-15	Flaggy fine sandy loam	SC-SM, SM	A-2, A-4	5-40	5-30	75-90	70-85	50-70	30-45	20-25	NP-5
	15-47	Very flaggy fine sandy loam	GC-GM, GM, SC-SM, SM	A-1, A-2, A-4	25-60	10-50	45-90	40-85	30-70	20-45	20-25	NP-5
	47-58	Very flaggy sandy loam	GM, SM	A-1, A-2	25-60	10-50	45-90	40-85	25-60	15-35	20-25	NP-5
	58-62	Weathered bedrock			---	---	---	---	---	---	---	---
252:												
Bigtom----------	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	---	---	---	---
	1-7	Extremely bouldery loam	GC-GM	A-2, A-4	30-45	30-40	35-55	30-50	25-50	20-40	25-30	5-10
	7-12	Extremely stony loam	GC-GM	A-2, A-4	30-45	30-40	35-55	30-50	25-50	20-40	25-30	5-10
	12-41	Extremely cobbly clay loam	CL, GC, SC	A-2, A-6	0-30	30-85	20-80	15-75	15-75	10-60	30-35	10-15
	41-61	Extremely cobbly sandy clay loam	GC, GC-GM	A-2	0-15	45-55	30-45	25-40	25-35	10-20	25-35	5-15
Namlot----------	0-3	Extremely cobbly sandy loam	GM	A-1	0-15	45-55	30-45	25-40	15-30	10-15	20-25	NP-5
	3-7	Very cobbly sandy clay loam	GC-GM, SC-SM	A-2	0	25-35	50-65	45-60	30-55	15-35	25-30	5-10
	7-17	Extremely cobbly sandy clay loam	GC-GM	A-2	0	45-55	30-45	25-40	25-35	10-20	25-30	5-10
	17-21	Unweathered bedrock			---	---	---	---	---	---	---	---

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
252:												
Dokie----------	0-4	Slightly decomposed plant material	PT	A-8	0	0	100	100	---	---	---	---
	4-7	Extremely bouldery loam	GC-GM	A-2, A-4	30-45	30-40	35-55	30-50	25-50	20-40	25-30	5-10
	7-16	Extremely bouldery loam	GC-GM	A-2, A-4	30-45	30-40	35-55	30-50	25-50	20-40	25-30	5-10
	16-36	Extremely bouldery loam	GC-GM	A-2, A-4	30-45	30-40	35-55	30-50	25-50	20-40	25-30	5-10
	36-64	Extremely bouldery sandy loam	GC-GM	A-2	30-45	30-40	35-55	30-50	15-35	10-20	25-30	5-10
253:												
Clapper---------	0-7	Gravelly loam	GC-GM, SC-SM	A-4	0	0	60-80	55-75	45-65	35-50	25-30	5-10
	7-13	Gravelly loam	SC-SM, SM, GC-GM, GM	A-4	0	0	60-80	55-75	45-65	35-50	20-30	NP-10
	13-36	Very gravelly loam	GC-GM	A-1, A-2, A-4	0-25	0-25	35-55	30-50	25-50	20-40	25-30	5-10
	36-49	Very cobbly loam	SC-SM, CL-ML, GC-GM	A-4, A-2	0-5	0-20	45-90	40-85	35-80	25-65	25-30	5-10
	49-60	Extremely cobbly sandy clay loam	GC-GM, GP-GC, SC-SM, SP-SC	A-1, A-2, A-4	0-5	0-20	20-80	15-75	10-70	5-40	25-30	5-10
254:												
Cliff----------	0-4	Sandy loam	SM	A-2, A-4	0	0	85-100	80-100	50-70	25-40	20-25	NP-5
	4-60	Sandy loam	SM	A-2, A-4	0	0	85-100	80-100	50-70	25-40	20-25	NP-5
255:												
Clyl----------	0-2	Channery silt loam	GM, ML	A-4	0	0-30	55-80	55-75	50-75	40-70	30-35	5-10
	2-9	Channery silt loam	GM, ML	A-4	0	0-25	55-80	55-75	50-75	40-70	25-30	NP-5
	9-19	Very channery silt loam	GM	A-2, A-4	0-5	0-30	30-55	30-50	30-50	25-45	30-35	5-10
	19-29	Very channery loam	GC-GM	A-2, A-4	0-25	0-30	30-55	30-50	25-50	20-40	20-30	5-10
	29-60	Extremely flaggy loam	SC-SM, GC-GM	A-2, A-4	30-80	15-70	20-80	15-75	15-70	10-50	20-30	5-10

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
255:												
Pinerid---------	0-2	Very channery silt loam	GC-GM, GM	A-2, A-4	0-25	0-30	30-55	30-50	30-50	25-45	25-35	NP-10
	2-6	Very channery silt loam	GM, GC-GM	A-2, A-4	0	0-30	30-55	30-50	30-50	25-45	25-30	NP-10
	6-13	Extremely channery silt loam	GM, GP-GM	A-2	0	0-40	10-30	10-25	10-25	5-20	30-35	NP-10
	13-17	Unweathered bedrock			---	---	---	---	---	---	---	---
256:												
Cortyzack-------	0-3	Loam	CL	A-6	0	0	100	100	85-95	60-75	30-35	10-15
	3-12	Clay loam	CL	A-6	0	0	100	100	90-100	70-80	30-40	10-15
	12-23	Clay loam	CL	A-6	0	0	100	100	90-100	70-80	30-40	10-15
	23-48	Clay loam	CL	A-6	0	0	95-100	90-100	80-100	65-80	30-40	10-15
	48-72	Loam	CL-ML	A-4	0	0	100	100	85-95	60-75	25-35	5-10
	72-76	Loam	CL-ML	A-4	0	0	100	100	85-95	60-75	25-35	5-10
Diagulch--------	0-9	Loam	CL, CL-ML	A-6, A-4	0	0	100	100	85-95	60-75	25-35	5-15
	9-34	Loam	CL-ML	A-4	0	0	100	100	85-95	60-75	25-30	5-10
	34-53	Sandy loam	SC-SM, SM	A-4, A-2	0	0-10	85-100	80-100	50-70	25-40	20-30	NP-10
	53-60	Gravelly loamy sand	SM	A-1, A-2	0	0-15	60-80	55-75	30-55	10-20	20-25	NP-5
257:												
Cortyzack-------	0-3	Loam	CL	A-6	0	0	100	100	85-95	60-75	30-35	10-15
	3-12	Clay loam	CL	A-6	0	0	100	100	90-100	70-80	30-40	10-15
	12-23	Clay loam	CL	A-6	0	0	100	100	90-100	70-80	30-40	10-15
	23-48	Clay loam	CL	A-6	0	0	95-100	90-100	80-100	65-80	30-40	10-15
	48-72	Loam	CL-ML	A-4	0	0	100	100	85-95	60-75	25-35	5-10
	72-76	Loam	CL-ML	A-4	0	0	100	100	85-95	60-75	25-35	5-10
Duffymont-------	0-13	Extremely flaggy fine sandy loam	GM	A-1, A-2	0-10	60-70	40-55	35-50	25-45	15-30	20-30	NP-5
	13-17	Extremely flaggy sandy loam	GC-GM, GM	A-1, A-2	0-10	60-70	40-55	35-50	20-35	15-20	20-30	NP-10
	17-21	Unweathered bedrock			---	---	---	---	---	---	---	---

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
258:												
Cortyzack-------	0-3	Loam	CL	A-6	0	0	100	100	85-95	60-75	30-35	10-15
	3-12	Clay loam	CL	A-6	0	0	100	100	90-100	70-80	30-40	10-15
	12-23	Clay loam	CL	A-6	0	0	100	100	90-100	70-80	30-40	10-15
	23-48	Clay loam	CL	A-6	0	0	95-100	90-100	80-100	65-80	30-40	10-15
	48-72	Loam	CL-ML	A-4	0	0	100	100	85-95	60-75	25-35	5-10
	72-76	Loam	CL-ML	A-4	0	0	100	100	85-95	60-75	25-35	5-10
Flynncove-------	0-8	Cobbly loam	CL, CL-ML, SC, SC-SM	A-4, A-6	0-10	15-25	80-95	75-90	65-85	45-70	25-35	5-15
	8-15	Cobbly sandy clay loam	SC	A-6	0-10	15-25	80-95	75-90	65-80	35-50	30-35	10-15
	15-37	Extremely cobbly sandy clay loam	GC	A-2	0-15	45-55	30-45	25-40	25-35	10-20	30-35	10-15
	37-60	Extremely cobbly sandy loam	GC-GM	A-1, A-2	0-15	45-55	30-45	25-40	15-30	10-15	25-30	5-10
259:												
Denco-----------	0-4	Silty clay loam	ML	A-4, A-6, A-7	0	0	100	100	95-100	85-95	30-50	5-20
	4-37	Silty clay	MH, ML	A-7	0	0	100	100	95-100	90-95	45-55	15-25
	37-41	Weathered bedrock			---	---	---	---	---	---	---	---
Gerst-----------	0-2	Loam	CL-ML	A-4	0	0-10	85-100	80-100	70-95	50-75	25-30	5-10
	2-12	Parachannery loam	CL-ML	A-4	0	0-15	85-100	80-100	70-95	50-75	25-30	5-10
	12-22	Weathered bedrock			---	---	---	---	---	---	---	---
260:												
Dokie-----------	0-4	Slightly decomposed plant material	PT	A-8	0	0	100	100	---	---	---	---
	4-7	Extremely bouldery loam	GC-GM	A-2, A-4	30-45	30-40	35-55	30-50	25-50	20-40	25-30	5-10
	7-16	Extremely bouldery loam	GC-GM	A-2, A-4	30-45	30-40	35-55	30-50	25-50	20-40	25-30	5-10
	16-36	Extremely bouldery loam	GC-GM	A-2, A-4	30-45	30-40	35-55	30-50	25-50	20-40	25-30	5-10
	36-64	Extremely bouldery sandy loam	GC-GM	A-2	30-45	30-40	35-55	30-50	15-35	10-20	25-30	5-10

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
260:												
Flynncove-------	0-8	Extremely stony loam	GC-GM, SC-SM	A-4	30-45	30-40	55-80	50-75	50-70	35-50	25-30	5-10
	8-13	Extremely stony sandy loam	GC-GM	A-1, A-2	30-45	30-40	35-55	30-50	15-35	10-20	25-30	5-10
	13-40	Extremely stony sandy clay loam	GC	A-2	30-45	30-40	35-55	30-50	25-45	10-30	30-35	10-15
	40-60	Extremely stony sandy clay loam	GC	A-2	30-45	30-40	35-55	30-50	25-45	10-30	30-35	10-15
261:												
Dokie-----------	0-4	Slightly decomposed plant material	PT	A-8	0	0	100	100	---	---	---	---
	4-7	Extremely bouldery loam	GC-GM	A-2, A-4	30-45	30-40	35-55	30-50	25-50	20-40	25-30	5-10
	7-16	Extremely bouldery loam	GC-GM	A-2, A-4	30-45	30-40	35-55	30-50	25-50	20-40	25-30	5-10
	16-36	Extremely bouldery loam	GC-GM	A-2, A-4	30-45	30-40	35-55	30-50	25-50	20-40	25-30	5-10
	36-64	Extremely bouldery sandy loam	GC-GM	A-2	30-45	30-40	35-55	30-50	15-35	10-20	25-30	5-10
Namlot----------	0-3	Extremely cobbly sandy loam	GM	A-1	0-15	45-55	30-45	25-40	15-30	10-15	20-25	NP-5
	3-7	Very cobbly sandy clay loam	GC-GM, SC-SM	A-2	0	25-35	50-65	45-60	30-55	15-35	25-30	5-10
	7-17	Extremely cobbly sandy clay loam	GC-GM	A-2	0	45-55	30-45	25-40	25-35	10-20	25-30	5-10
	17-21	Unweathered bedrock			---	---	---	---	---	---	---	---

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
262:												
Gompers---------	0-3	Very channery silt loam	GM	A-1, A-2, A-4	0	0-15	35-60	30-55	25-50	20-45	30-35	5-10
	3-8	Very channery loam	GC-GM	A-2, A-4	0	0-15	35-60	30-55	25-50	20-40	25-30	5-10
	8-18	Extremely channery loam	GM, GP-GM	A-1	0-10	10-25	20-30	15-25	5-20	5-15	20-25	NP-5
	18-22	Unweathered bedrock			---	---	---	---	---	---	---	---
263:												
Hanksville------	0-3	Silty clay loam	ML	A-6, A-7	0	0	100	100	95-100	85-95	30-50	5-15
	3-33	Silty clay, silty clay loam, clay	MH, ML	A-6, A-7	0	0	100	100	90-100	75-95	30-60	5-35
	33-37	Weathered bedrock			---	---	---	---	---	---	---	---
264:												
Mikim-----------	0-6	Loam	CL-ML	A-4	0	0	100	100	85-100	60-80	20-30	5-10
	6-60	Loam, clay loam	CL, CL-ML	A-4, A-6	0	0	85-100	80-100	65-100	50-80	20-35	5-15
265:												
Mikim-----------	0-6	Silt loam	ML	A-4	0	0	100	100	90-100	70-90	30-35	5-10
	6-60	Stratified sandy loam to clay loam	CL, CL-ML, SC, SC-SM	A-4, A-6	0	0	100	100	80-95	40-75	25-40	5-15
266:												
Rock outcrop----	0-60	Unweathered bedrock			---	---	---	---	---	---	---	---
Boxring---------	0-6	Extremely stony sandy loam	GC-GM, GM	A-1	30-45	30-40	35-55	30-50	15-35	10-20	20-30	NP-10
	6-14	Extremely cobbly sandy clay loam	GC-GM, GC	A-1, A-2	0-15	45-55	30-45	25-40	25-35	10-20	25-35	5-15
	14-18	Unweathered bedrock			---	---	---	---	---	---	---	---

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
266:												
Tridell---------	0-2	Extremely cobbly loam	GC-GM	A-2	0-15	45-55	30-45	25-40	20-35	15-30	20-30	5-10
	2-8	Very gravelly loam	GC, GC-GM	A-2, A-4	0	0-15	35-55	30-50	25-50	20-40	20-30	5-10
	8-37	Very cobbly loam	GC-GM, SC-SM	A-2, A-4	0	25-70	50-90	45-85	35-80	30-50	20-30	5-10
	37-60	Extremely cobbly loam	GC-GM, SC-SM	A-2, A-4	0	45-85	30-80	25-75	20-70	15-50	20-30	5-10
267:												
Solirec---------	0-4	Fine sandy loam	SC, SC-SM	A-4	0	0	100	100	70-85	40-50	20-30	NP-10
	4-12	Sandy clay loam	SC, SC-SM	A-4, A-6	0	0	100	100	80-90	35-50	25-35	5-15
	12-19	Loam	CL-ML	A-4	0	0	100	100	85-95	60-75	25-30	5-10
	19-75	Clay loam	CL-ML	A-4	0	0	100	100	90-100	70-80	25-30	5-10
Abracon---------	0-2	Loam	CL-ML	A-4	0	0	85-100	80-100	65-95	50-75	20-30	5-10
	2-16	Loam	CL-ML, ML	A-4	0	0	90-100	85-100	70-95	55-75	20-30	NP-10
	16-51	Loam, clay loam	CL-ML, ML	A-4	0	0	85-100	80-100	65-100	50-80	20-30	NP-10
	51-60	Loam	CL-ML, ML	A-4	0	0-10	90-100	85-100	70-95	55-75	20-30	NP-10
Begay-----------	0-4	Sandy loam	SM	A-2, A-4	0	0	100	100	60-70	30-40	20-25	NP-5
	4-12	Sandy loam	SM	A-2, A-4	0	0	100	100	60-70	30-40	20-25	NP-5
	12-37	Sandy loam	SC-SM, SM	A-2, A-4	0	0	100	100	60-70	30-40	20-30	NP-10
	37-60	Sandy loam	SC-SM, SM	A-2, A-4	0	0	100	100	60-70	30-40	20-30	NP-10
268:												
Toliver---------	0-7	Extremely flaggy fine sandy loam	GM, GP-GM, SM, SP-SM	A-1, A-2, A-3, A-4	30-85	0-80	20-80	15-75	10-65	5-40	20-25	NP-5
	7-19	Channery fine sandy loam	GM, SM	A-2, A-4	0-10	0-25	55-80	55-75	40-65	25-40	20-25	NP-5
	19-59	Very flaggy fine sandy loam	GM, SM	A-1, A-2, A-4	25-60	10-50	45-90	40-85	30-70	20-45	20-25	NP-5
	59-63	Unweathered bedrock			---	---	---	---	---	---	---	---
Rock outcrop----	0-60	Unweathered bedrock			---	---	---	---	---	---	---	---

Table 20.--Engineering index properties--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In.				Pct.	Pct.					Pct.	
269:												
Walknolls-------	0-2	Extremely channery sandy loam	GP, GP-GM	A-1	0-10	10-25	20-30	15-25	5-15	0-10	20-25	NP-5
	2-7	Very channery sandy loam	GM, SM	A-1	0	0-15	35-60	30-55	15-35	10-20	20-25	NP-5
	7-14	Extremely channery sandy loam	GP, GP-GM	A-1	0-10	10-25	20-30	15-25	5-15	0-10	20-25	NP-5
	14-18	Unweathered bedrock			---	---	---	---	---	---	---	---
Badland---------	0-2	Silty clay, clay	CH, CL	A-7-6	0-10	0-25	75-100	70-100	70-100	65-95	35-55	15-40
	2-12	Weathered bedrock			---	---	---	---	---	---	---	---
Rock outcrop----	0-60	Unweathered bedrock			---	---	---	---	---	---	---	---
270:												
Walknolls-------	0-3	Very channery loam	GM	A-1, A-2, A-4	0	0-15	35-60	30-55	25-50	20-40	20-25	NP-5
	3-7	Very channery loam	GC-GM, GM	A-1, A-2, A-4	0	0-15	35-60	30-55	25-50	20-40	20-30	NP-10
	7-16	Extremely channery sandy loam	GP, GP-GM	A-1	0-10	10-25	20-30	15-25	5-15	0-10	20-25	NP-5
	16-20	Unweathered bedrock			---	---	---	---	---	---	---	---
Gilston---------	0-4	Sandy loam	SC-SM, SM	A-2, A-4	0	0-10	85-100	80-100	50-70	25-40	20-30	NP-10
	4-52	Gravelly sandy loam	SC-SM, SM	A-1, A-2	0	0-15	60-80	55-75	35-50	20-30	20-30	NP-10
	52-68	Gypsiferous loam	CL-ML, ML	A-4	0	0-10	85-100	80-100	70-95	50-75	20-25	NP-10
271:												
Water-----------	---	---	---	---	---	---	---	---	---	---	---	---

Table 21.--Physical properties of the soils

(Entries under "Erosion factors--T" apply to the entire profile. Entries under "Wind erodibility group" and "Wind erodibility index" apply only to the surface layer. Absence of an entry indicates that data were not estimated.)

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
1:														
Abor	0-4	---	---	35-40	1.10-1.20	0.06-0.2	0.17-0.20	3.0-5.9	1.0-2.0	.28	.28	3	4L	86
	4-37	---	---	50-60	1.25-1.35	0.0015-0.06	0.13-0.16	6.0-8.9	0.5-1.0	.24	.24			
	37-41	---	---	---	---	0.06-0.2	---	---	---	---	---			
2:														
Abor	0-4	---	---	35-40	1.10-1.20	0.06-0.2	0.17-0.20	3.0-5.9	1.0-2.0	.28	.28	3	4L	86
	4-37	---	---	50-60	1.25-1.35	0.0015-0.06	0.13-0.16	6.0-8.9	0.5-1.0	.24	.24			
	37-41	---	---	---	---	0.06-0.2	---	---	---	---	---			
3:														
Adderton	0-22	---	---	18-27	1.20-1.30	0.6-2	0.16-0.19	0.0-2.9	2.0-4.0	.24	.24	5	6	48
	22-39	---	---	20-35	1.30-1.40	0.6-2	0.17-0.21	0.0-2.9	1.0-2.0	.28	.28			
	39-60	---	---	15-27	1.30-1.40	0.6-2	0.14-0.18	0.0-2.9	0.5-1.0	.28	.28			
4:														
Almy	0-6	---	---	20-27	1.20-1.30	0.6-2	0.14-0.18	0.0-2.9	1.0-2.0	.28	.28	5	6	48
	6-30	---	---	25-34	1.25-1.30	0.2-0.6	0.16-0.20	0.0-2.9	0.5-1.0	.37	.37			
	30-60	---	---	15-27	1.30-1.35	0.6-2	0.12-0.16	0.0-2.9	0.0-0.5	.37	.37			
5:														
Apmay	0-17	---	---	27-32	1.25-1.30	0.6-2	0.17-0.20	0.0-2.9	2.0-4.0	.17	.17	3	6	48
	17-30	---	---	20-32	1.25-1.30	0.6-2	0.15-0.17	0.0-2.9	1.0-2.0	.20	.20			
	30-60	---	---	0-5	1.55-1.65	6-20	0.02-0.05	0.0-2.9	0.0-0.5	.02	.20			
6:														
Avalon	0-3	---	---	14-18	1.35-1.50	2-6	0.12-0.14	0.0-2.9	0.5-1.0	.28	.28	5	3	86
	3-12	---	---	27-35	1.25-1.30	0.2-0.6	0.13-0.16	0.0-2.9	0.0-0.5	.28	.28			
	12-60	---	---	27-35	1.25-1.30	0.2-0.6	0.13-0.16	0.0-2.9	0.0-0.5	.28	.28			
Mack	0-4	---	---	20-27	1.15-1.25	0.6-2	0.14-0.17	0.0-2.9	0.5-1.0	.37	.37	2	6	48
	4-13	---	---	27-34	1.30-1.40	0.2-0.6	0.17-0.21	3.0-5.9	0.5-1.0	.24	.24			
	13-42	---	---	22-30	1.30-1.40	0.2-0.6	0.15-0.18	0.0-2.9	0.0-0.5	.37	.37			
	42-60	---	---	22-30	1.35-1.45	0.6-2	0.11-0.16	0.0-2.9	0.0-0.5	.20	.32			
7:														
Avalon	0-3	---	---	23-27	1.25-1.35	0.6-2	0.16-0.18	0.0-2.9	0.5-1.0	.37	.37	4	4L	86
	3-36	---	---	24-34	1.25-1.35	0.2-0.6	0.14-0.17	0.0-2.9	0.5-1.0	.37	.37			
	36-43	---	---	27-34	1.30-1.40	0.2-0.6	0.13-0.16	0.0-2.9	0.5-1.0	.15	.24			
	43-47	---	---	---	---	0.06-0.2	---	---	---	---	---			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
7:														
Persayo, moist------	0-2	---	---	21-27	1.25-1.40	0.6-2	0.10-0.13	0.0-2.9	0.5-1.0	.20	.37	2	4L	86
	2-10	---	---	21-30	1.25-1.40	0.6-2	0.16-0.18	0.0-2.9	0.0-0.5	.37	.37			
	10-14	---	---	---	---	0.06-0.2	---	---	---	---	---			
Degater----------	0-1	---	---	40-50	1.00-1.10	0.0015-0.06	0.13-0.16	6.0-8.9	0.5-1.0	.17	.17	3	4	86
	1-20	---	---	40-50	1.15-1.25	0.0015-0.06	0.13-0.16	6.0-8.9	0.0-0.5	.24	.24			
	20-38	---	---	35-50	1.15-1.25	0.0015-0.06	0.10-0.15	6.0-8.9	0.0-0.5	.28	.28			
	38-42	---	---	---	---	0.06-0.2	---	---	---	---	---			
8:														
Badland----------	0-2	---	---	40-60	1.15-1.30	0.0015-0.2	0.00-0.12	6.0-8.9	0.0-0.0	.10	.20	1	8	0
	2-12	---	---	---	---	0.0001-0.2	---	---	---	---	---			
9:														
Baroid----------	0-3	---	---	3-10	1.45-1.55	6-20	0.08-0.10	0.0-2.9	0.5-1.0	.28	.28	5	2	134
	3-47	---	---	3-10	1.40-1.45	6-20	0.06-0.08	0.0-2.9	0.0-0.5	.32	.32			
	47-60	---	---	5-15	---	0.6-2	0.16-0.18	---	0.0-0.5	---	---			
Eghelm----------	0-4	---	---	10-15	1.20-1.30	2-6	0.13-0.15	0.0-2.9	0.5-1.0	.28	.28	5	3	86
	4-21	---	---	10-25	1.30-1.40	2-6	0.12-0.15	0.0-2.9	0.0-0.5	.24	.24			
	21-60	---	---	8-18	1.30-1.40	2-6	0.11-0.13	0.0-2.9	0.0-0.5	.24	.24			
10:														
Battlement----------	0-3	---	---	14-18	1.35-1.50	2-6	0.13-0.15	0.0-2.9	0.5-1.0	.28	.28	5	3	86
	3-60	---	---	18-32	1.15-1.50	0.2-2	0.18-0.20	0.0-2.9	0.5-1.0	.28	.28			
11:														
Battlement, saline--	0-4	---	---	20-27	1.15-1.30	0.6-2	0.14-0.17	0.0-2.9	1.0-3.0	.37	.37	3	4L	86
	4-17	---	---	20-33	1.15-1.25	0.2-0.6	0.13-0.15	0.0-2.9	0.5-1.0	.37	.37			
	17-30	---	---	20-33	1.15-1.25	0.2-0.6	0.10-0.13	0.0-2.9	0.5-1.0	.37	.37			
	30-60	---	---	18-27	1.20-1.30	0.6-2	0.10-0.13	0.0-2.9	0.5-1.0	.32	.32			
12:														
Berlake----------	0-10	---	---	12-15	1.30-1.40	2-6	0.09-0.13	0.0-2.9	1.0-2.0	.20	.20	4	3	86
	10-23	---	---	20-30	1.30-1.40	0.6-2	0.13-0.18	0.0-2.9	0.5-2.0	.20	.20			
	23-31	---	---	15-18	1.40-1.50	2-6	0.09-0.12	0.0-2.9	0.0-1.0	.28	.28			
	31-60	---	---	7-10	1.50-1.60	6-20	0.05-0.07	0.0-2.9	0.0-1.0	.10	.20			
13:														
Berlake----------	0-10	---	---	12-15	1.30-1.40	2-6	0.09-0.13	0.0-2.9	1.0-2.0	.20	.20	4	3	86
	10-23	---	---	20-30	1.30-1.40	0.6-2	0.13-0.18	0.0-2.9	0.5-2.0	.20	.20			
	23-31	---	---	15-18	1.40-1.50	2-6	0.09-0.12	0.0-2.9	0.0-1.0	.28	.28			
	31-60	---	---	7-10	1.50-1.60	6-20	0.05-0.07	0.0-2.9	0.0-1.0	.10	.20			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
14:														
Berlake	0-10	---	---	12-15	1.30-1.40	2-6	0.09-0.13	0.0-2.9	1.0-2.0	.20	.20	4	3	86
	10-25	---	---	20-30	1.30-1.40	0.6-2	0.13-0.18	0.0-2.9	0.5-2.0	.20	.20			
	25-33	---	---	15-18	1.40-1.50	2-6	0.09-0.12	0.0-2.9	0.0-1.0	.28	.28			
	33-60	---	---	7-10	1.50-1.60	6-20	0.05-0.07	0.0-2.9	0.0-1.0	.10	.20			
Maysprings	0-6	---	---	10-15	1.35-1.40	2-6	0.09-0.11	0.0-2.9	1.0-2.0	.20	.20	3	3	86
	6-22	---	---	18-27	1.25-1.30	0.6-2	0.12-0.16	0.0-2.9	0.5-1.0	.24	.24			
	22-29	---	---	10-18	1.40-1.45	2-6	0.09-0.11	0.0-2.9	0.0-0.5	.28	.28			
	29-60	---	---	0-10	1.45-1.50	6-20	0.03-0.07	0.0-2.9	0.0-0.5	.10	.10			
15:														
Berlake	0-14	---	---	12-18	1.30-1.35	2-6	0.09-0.11	0.0-2.9	2.0-3.0	.20	.20	5	3	86
	14-57	---	---	20-30	1.25-1.35	0.6-2	0.14-0.18	0.0-2.9	0.5-1.0	.20	.20			
	57-60	---	---	15-22	1.30-1.40	0.6-2	0.12-0.16	0.0-2.9	0.0-0.5	.24	.24			
Taffom	0-7	---	---	10-15	1.30-1.40	2-6	0.09-0.12	0.0-2.9	1.0-2.0	.20	.20	5	3	86
	7-41	---	---	20-30	1.30-1.40	0.6-2	0.14-0.18	0.0-2.9	0.0-0.5	.24	.24			
	41-60	---	---	5-20	1.30-1.40	2-6	0.03-0.07	0.0-2.9	0.0-0.5	.28	.28			
Gretdivid	0-3	---	---	5-10	1.40-1.50	6-20	0.05-0.07	0.0-2.9	0.5-1.0	.15	.15	5	2	134
	3-7	---	---	14-25	1.30-1.40	0.6-2	0.14-0.16	0.0-2.9	0.5-1.0	.20	.20			
	7-60	---	---	4-8	1.45-1.55	6-20	0.04-0.06	0.0-2.9	0.0-0.5	.05	.10			
16:														
Bilhil	0-12	---	---	35-40	1.05-1.15	0.06-0.2	0.17-0.21	3.0-5.9	1.0-2.0	.20	.20	5	4	86
	12-23	---	---	35-50	1.15-1.25	0.0015-0.06	0.15-0.19	6.0-8.9	0.0-0.5	.28	.28			
	23-60	---	---	35-50	1.20-1.30	0.0015-0.06	0.15-0.19	6.0-8.9	0.0-0.5	.28	.28			
17:														
Binco	0-2	---	---	35-40	1.10-1.20	0.06-0.2	0.15-0.18	3.0-5.9	2.0-3.0	.10	.20	5	4	86
	2-9	---	---	35-45	1.20-1.30	0.06-0.2	0.15-0.19	6.0-8.9	0.5-1.0	.24	.24			
	9-60	---	---	40-60	1.20-1.30	0.0015-0.06	0.14-0.16	6.0-8.9	0.5-1.0	.17	.17			
18:														
Boltus	0-3	---	---	35-40	1.10-1.20	0.06-0.2	0.15-0.17	0.0-2.9	0.5-1.0	.32	.32	2	4L	86
	3-17	---	---	35-50	1.20-1.30	0.06-0.2	0.14-0.17	6.0-8.9	0.0-0.5	.37	.37			
	17-21	---	---	---	---	0.06-0.2	---	---	---	---	---			
Beamton	0-2	---	---	33-40	1.10-1.20	0.2-0.6	0.15-0.17	3.0-5.9	0.5-1.0	.32	.32	3	4L	86
	2-26	---	---	35-45	1.20-1.30	0.06-0.2	0.12-0.15	3.0-5.9	0.0-0.5	.37	.37			
	26-33	---	---	35-45	1.20-1.30	0.06-0.2	0.12-0.15	3.0-5.9	0.0-0.5	.37	.37			
	33-37	---	---	---	---	0.06-0.2	---	---	---	---	---			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
19:														
Borollic Natrargids---------	0-5	---	---	10-20	1.35-1.45	2-6	0.13-0.15	0.0-2.9	1.0-2.0	.24	.24	5	3	86
	5-45	---	---	27-45	1.15-1.25	0.0015-0.06	0.10-0.16	3.0-5.9	0.5-1.0	.24	.24			
	45-60	---	---	27-45	1.15-1.25	0.2-0.6	0.10-0.16	3.0-5.9	0.5-1.0	.24	.24			
Borollic Haplargids---------	0-2	---	---	8-20	1.40-1.50	0.6-6	0.10-0.13	0.0-2.9	1.0-2.0	.24	.24	5	3	86
	2-30	---	---	20-45	1.25-1.30	0.2-0.6	0.14-0.20	3.0-5.9	0.5-1.0	.24	.24			
	30-60	---	---	10-35	1.25-1.35	0.6-2	0.10-0.18	0.0-2.9	0.5-1.0	.24	.24			
Ustic Torrifluvents------	0-4	---	---	10-30	1.35-1.50	2-6	0.13-0.15	0.0-2.9	0.5-2.0	.28	.28	3	3	86
	4-60	---	---	13-35	1.20-1.35	0.2-2	0.14-0.18	0.0-2.9	0.5-1.0	.24	.24			
20:														
Brownsto------------	0-3	---	---	15-20	1.15-1.25	0.6-2	0.12-0.14	0.0-2.9	0.5-2.0	.20	.37	2	4L	86
	3-14	---	---	18-25	1.20-1.30	0.6-2	0.12-0.14	0.0-2.9	0.5-1.0	.20	.37			
	14-29	---	---	18-25	1.25-1.35	0.6-2	0.06-0.10	0.0-2.9	0.0-0.5	.15	.43			
	29-60	---	---	15-22	1.25-1.35	0.6-2	0.05-0.09	0.0-2.9	0.0-0.5	.10	.32			
Castee--------------	0-2	---	---	12-18	1.25-1.40	0.6-2	0.14-0.17	0.0-2.9	0.5-2.0	.37	.37	2	4L	86
	2-32	---	---	12-18	1.25-1.35	0.6-2	0.13-0.16	0.0-2.9	0.0-0.5	.43	.43			
	32-53	---	---	12-18	1.25-1.35	0.6-2	0.09-0.12	0.0-2.9	0.0-0.5	.20	.37			
	53-60	---	---	10-15	1.35-1.45	2-6	0.07-0.10	0.0-2.9	0.0-0.5	.15	.32			
21:														
Bulkley-------------	0-2	---	---	20-27	1.20-1.25	0.6-2	0.13-0.15	0.0-2.9	1.0-2.0	.15	.28	5	6	48
	2-33	---	---	40-60	1.15-1.20	0.06-0.2	0.14-0.16	6.0-8.9	0.5-1.0	.17	.17			
	33-60	---	---	35-45	1.15-1.20	0.06-0.2	0.14-0.16	6.0-8.9	0.5-1.0	.24	.24			
22:														
Bulkley-------------	0-4	---	---	40-50	1.20-1.25	0.0015-0.06	0.14-0.17	6.0-8.9	0.5-1.0	.24	.24	5	4	86
	4-36	---	---	50-60	1.30-1.35	0.0015-0.06	0.14-0.16	6.0-8.9	0.5-1.0	.24	.24			
	36-60	---	---	50-60	1.30-1.35	0.0015-0.06	0.14-0.16	6.0-8.9	0.5-1.0	.24	.24			
23:														
Bulkley-------------	0-4	---	---	40-50	1.20-1.25	0.0015-0.06	0.14-0.17	6.0-8.9	0.5-1.0	.24	.24	5	4	86
	4-36	---	---	50-60	1.30-1.35	0.0015-0.06	0.14-0.16	6.0-8.9	0.5-1.0	.24	.24			
	36-60	---	---	50-60	1.30-1.35	0.0015-0.06	0.14-0.16	6.0-8.9	0.5-1.0	.24	.24			
24:														
Bulkley-------------	0-3	---	---	35-40	1.25-1.30	0.06-0.2	0.13-0.16	0.0-2.9	0.5-1.0	.10	.24	5	8	0
	3-41	---	---	50-60	1.30-1.35	0.0015-0.06	0.14-0.16	6.0-8.9	0.5-1.0	.24	.24			
	41-60	---	---	50-60	1.30-1.35	0.0015-0.06	0.14-0.16	6.0-8.9	0.5-1.0	.24	.24			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
24:														
Quilt----------	0-7	---	---	20-25	1.10-1.25	0.6-2	0.13-0.17	0.0-2.9	2.0-3.0	.15	.28	5	6	48
	7-38	---	---	30-35	1.15-1.25	0.2-0.6	0.12-0.15	3.0-5.9	0.0-1.0	.15	.24			
	38-48	---	---	35-45	1.15-1.25	0.06-0.2	0.12-0.15	3.0-5.9	0.0-1.0	.15	.24			
	48-60	---	---	35-55	1.15-1.25	0.06-0.2	0.12-0.15	6.0-8.9	0.0-1.0	.15	.24			
25:														
Campspass----------	0-2	---	---	14-18	1.25-1.35	0.6-2	0.13-0.15	0.0-2.9	2.0-3.0	.24	.24	5	3	86
	2-8	---	---	15-25	1.25-1.40	0.6-2	0.14-0.18	0.0-2.9	0.5-1.0	.37	.37			
	8-20	---	---	35-45	1.20-1.30	0.06-0.2	0.16-0.20	6.0-8.9	0.5-1.0	.24	.24			
	20-60	---	---	25-35	1.25-1.35	0.2-0.6	0.14-0.18	3.0-5.9	0.5-1.0	.32	.32			
26:														
Campspass----------	0-2	---	---	14-18	1.25-1.35	0.6-2	0.13-0.15	0.0-2.9	2.0-3.0	.24	.24	5	3	86
	2-8	---	---	15-25	1.25-1.40	0.6-2	0.14-0.18	0.0-2.9	0.5-1.0	.37	.37			
	8-20	---	---	35-45	1.20-1.30	0.06-0.2	0.16-0.20	6.0-8.9	0.5-1.0	.24	.24			
	20-60	---	---	25-35	1.25-1.35	0.2-0.6	0.14-0.18	3.0-5.9	0.5-1.0	.32	.32			
27:														
Canlodore----------	0-1	---	---	0-5	---	---	---	---	---	---	---	5	8	0
	1-7	---	---	8-13	1.40-1.50	6-20	0.03-0.05	0.0-2.9	1.0-2.0	.05	.17			
	7-40	---	---	8-13	1.50-1.60	6-20	0.04-0.06	0.0-2.9	0.0-0.5	.05	.20			
	40-60	---	---	5-10	1.50-1.60	6-20	0.04-0.06	0.0-2.9	0.0-0.5	.05	.20			
28:														
Carbol----------	0-2	---	---	15-20	1.35-1.45	0.6-2	0.13-0.17	0.0-2.9	1.0-2.0	.24	.24	1	3	86
	2-14	---	---	18-27	1.30-1.40	0.6-2	0.11-0.15	0.0-2.9	0.5-2.0	.15	.28			
	14-18	---	---	---	---	0.06-0.2	---	---	---	---	---			
Irigul----------	0-6	---	---	15-27	1.25-1.40	0.6-6	0.10-0.13	0.0-2.9	1.0-3.0	.15	.28	1	6	48
	6-15	---	---	20-27	1.25-1.40	0.2-2	0.07-0.10	0.0-2.9	0.5-1.0	.15	.37			
	15-19	---	---	---	---	0.06-0.2	---	---	---	---	---			
Rock outcrop--------	0-60	---	---	0-0	---	0.0000-0.0000	0.00-0.00	---	---	---	---	-	8	0
29:														
Carbol----------	0-2	---	---	15-20	1.35-1.45	0.6-2	0.13-0.17	0.0-2.9	1.0-2.0	.24	.24	1	3	86
	2-14	---	---	18-27	1.30-1.40	0.6-2	0.11-0.15	0.0-2.9	0.5-2.0	.15	.28			
	14-18	---	---	---	---	0.06-0.2	---	---	---	---	---			
Miracle----------	0-8	---	---	10-20	1.40-1.50	2-6	0.12-0.15	0.0-2.9	2.0-4.0	.20	.20	2	3	86
	8-37	---	---	18-35	1.25-1.40	0.6-2	0.14-0.16	0.0-2.9	0.5-2.0	.28	.28			
	37-41	---	---	---	---	0.06-0.2	---	---	---	---	---			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
30:														
Carmody	0-3	---	---	5-12	1.45-1.55	2-6	0.06-0.08	0.0-2.9	1.0-2.0	.24	.24	3	2	134
	3-23	---	---	10-18	1.35-1.40	2-6	0.13-0.15	0.0-2.9	0.5-1.0	.28	.28			
	23-27	---	---	---	---	0.2-0.6	---	---	---	---	---			
Rock River	0-3	---	---	10-20	1.30-1.40	2-6	0.12-0.14	0.0-2.9	1.0-2.0	.24	.24	5	3	86
	3-22	---	---	20-30	1.30-1.40	0.6-2	0.14-0.18	0.0-2.9	0.5-1.0	.20	.20			
	22-32	---	---	15-25	1.35-1.45	0.6-2	0.12-0.16	0.0-2.9	0.5-1.0	.24	.24			
	32-60	---	---	10-18	1.50-1.60	2-6	0.08-0.12	0.0-2.9	0.5-1.0	.20	.20			
Crestman	0-2	---	---	6-12	1.40-1.50	6-20	0.07-0.10	0.0-2.9	0.5-1.0	.20	.20	2	2	134
	2-14	---	---	3-12	1.50-1.60	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.24			
	14-18	---	---	---	---	0.06-0.2	---	---	---	---	---			
31:														
Castee	0-2	---	---	12-18	1.25-1.40	0.6-2	0.14-0.17	0.0-2.9	0.5-2.0	.37	.37	2	4L	86
	2-32	---	---	12-18	1.25-1.35	0.6-2	0.13-0.16	0.0-2.9	0.0-0.5	.43	.43			
	32-53	---	---	12-18	1.25-1.35	0.6-2	0.09-0.12	0.0-2.9	0.0-0.5	.20	.37			
	53-60	---	---	10-15	1.35-1.45	2-6	0.07-0.10	0.0-2.9	0.0-0.5	.15	.32			
32:														
Chroder	0-3	---	---	11-15	1.40-1.50	2-6	0.10-0.14	0.0-2.9	0.0-0.5	.32	.32	5	3	86
	3-10	---	---	11-15	1.40-1.50	2-6	0.10-0.14	0.0-2.9	0.0-0.5	.32	.32			
	10-60	---	---	11-15	1.40-1.50	2-6	0.10-0.14	0.0-2.9	0.0-0.5	.32	.32			
33:														
Clayburn, warm	0-11	---	---	20-27	1.15-1.20	0.6-2	0.16-0.18	0.0-2.9	2.0-3.0	.28	.28	5	6	48
	11-46	---	---	27-35	1.25-1.30	0.2-0.6	0.17-0.20	3.0-5.9	1.0-2.0	.20	.20			
	46-60	---	---	24-30	1.30-1.35	0.6-2	0.15-0.17	0.0-2.9	0.0-0.5	.37	.37			
34:														
Clayburn	0-17	---	---	12-20	1.25-1.35	2-6	0.12-0.14	0.0-2.9	2.0-4.0	.20	.20	5	3	86
	17-31	---	---	20-30	1.25-1.35	0.6-2	0.15-0.18	0.0-2.9	0.5-1.0	.20	.20			
	31-60	---	---	12-20	1.35-1.45	2-6	0.13-0.16	0.0-2.9	0.0-0.5	.32	.32			
Foidel	0-13	---	---	12-20	1.25-1.35	2-6	0.13-0.15	0.0-2.9	3.0-4.0	.15	.15	5	3	86
	13-33	---	---	15-27	1.25-1.35	0.6-2	0.14-0.16	0.0-2.9	0.5-1.0	.28	.28			
	33-60	---	---	24-35	1.25-1.35	0.6-2	0.16-0.18	3.0-5.9	0.0-0.5	.24	.24			
35:														
Clayburn	0-17	---	---	20-27	1.15-1.20	0.6-2	0.16-0.18	0.0-2.9	2.0-3.0	.28	.28	5	6	48
	17-50	---	---	27-35	1.25-1.30	0.2-0.6	0.17-0.20	3.0-5.9	1.0-2.0	.20	.20			
	50-60	---	---	24-30	1.30-1.35	0.6-2	0.15-0.17	0.0-2.9	0.0-0.5	.37	.37			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
35:														
Youga, moist--------	0-1	---	---	0-5	---	20-40	---	---	---	---	---	5	5	56
	1-14	---	---	18-22	1.10-1.20	0.6-2	0.16-0.18	0.0-2.9	2.0-3.0	.28	.28			
	14-40	---	---	30-35	1.25-1.35	0.2-0.6	0.18-0.21	3.0-5.9	0.5-1.0	.24	.24			
	40-60	---	---	14-30	1.30-1.40	0.6-2	0.17-0.19	0.0-2.9	0.0-0.5	.24	.24			
36:														
Clifsand----------	0-2	---	---	5-10	1.40-1.50	2-6	0.07-0.11	0.0-2.9	0.5-1.0	.20	.20	3	2	134
	2-13	---	---	10-18	1.30-1.40	2-6	0.10-0.13	0.0-2.9	0.0-0.5	.32	.32			
	13-43	---	---	10-18	1.35-1.45	2-6	0.05-0.09	0.0-2.9	0.0-0.5	.10	.32			
	43-60	---	---	5-10	1.45-1.55	6-20	0.01-0.02	0.0-2.9	0.0-0.5	.02	.20			
Chroder----------	0-3	---	---	11-15	1.45-1.55	2-6	0.09-0.13	0.0-2.9	0.0-0.5	.24	.24	5	2	134
	3-10	---	---	11-15	1.40-1.50	2-6	0.10-0.14	0.0-2.9	0.0-0.5	.32	.32			
	10-43	---	---	11-15	1.40-1.50	2-6	0.10-0.14	0.0-2.9	0.0-0.5	.32	.32			
	43-65	---	---	11-15	1.40-1.50	2-6	0.10-0.14	0.0-2.9	0.0-0.5	.32	.32			
37:														
Cochetopa----------	0-11	---	---	20-27	1.10-1.15	0.6-2	0.16-0.18	0.0-2.9	3.0-4.0	.20	.20	5	6	48
	11-19	---	---	20-35	1.10-1.25	0.2-2	0.17-0.20	0.0-2.9	2.0-3.0	.20	.20			
	19-48	---	---	35-55	1.15-1.25	0.06-0.2	0.17-0.20	6.0-8.9	0.5-1.0	.20	.20			
	48-60	---	---	35-55	1.15-1.25	0.06-0.2	0.17-0.20	6.0-8.9	0.0-0.5	.28	.28			
38:														
Cochetopa----------	0-19	---	---	20-27	1.10-1.15	0.6-2	0.16-0.18	0.0-2.9	3.0-4.0	.20	.20	5	6	48
	19-48	---	---	35-55	1.15-1.25	0.06-0.2	0.17-0.20	6.0-8.9	0.5-1.0	.20	.20			
	48-60	---	---	35-55	1.15-1.25	0.06-0.2	0.17-0.20	6.0-8.9	0.0-0.5	.28	.28			
39:														
Cochetopa, warm-----	0-11	---	---	20-27	1.10-1.15	0.6-2	0.16-0.18	0.0-2.9	3.0-4.0	.20	.20	5	6	48
	11-19	---	---	20-35	1.10-1.25	0.2-2	0.17-0.20	0.0-2.9	2.0-3.0	.20	.20			
	19-48	---	---	35-55	1.15-1.25	0.06-0.2	0.17-0.20	6.0-8.9	0.5-1.0	.20	.20			
	48-60	---	---	35-55	1.15-1.25	0.06-0.2	0.17-0.20	6.0-8.9	0.0-0.5	.28	.28			
40:														
Cochetopa----------	0-19	---	---	20-27	1.10-1.15	0.6-2	0.16-0.18	0.0-2.9	3.0-4.0	.20	.20	5	6	48
	19-48	---	---	35-55	1.15-1.25	0.06-0.2	0.17-0.20	6.0-8.9	0.5-1.0	.20	.20			
	48-60	---	---	35-55	1.15-1.25	0.06-0.2	0.17-0.20	6.0-8.9	0.0-0.5	.28	.28			
Gothic----------	0-12	---	---	20-27	1.20-1.25	0.6-2	0.09-0.13	0.0-2.9	3.0-4.0	.05	.20	5	8	0
	12-17	---	---	35-40	1.25-1.40	0.06-0.2	0.13-0.16	3.0-5.9	1.0-2.0	.10	.20			
	17-42	---	---	35-55	1.15-1.20	0.06-0.2	0.14-0.18	6.0-8.9	1.0-2.0	.20	.20			
	42-60	---	---	35-55	1.15-1.20	0.06-0.2	0.12-0.18	6.0-8.9	0.5-1.0	.20	.20			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
41:														
Cochetopa	0-21	---	---	20-27	1.25-1.35	0.6-2	0.12-0.15	0.0-2.9	3.0-4.0	.10	.20	5	6	48
	21-51	---	---	35-55	1.15-1.25	0.06-0.2	0.17-0.20	6.0-8.9	0.5-1.0	.20	.20			
	51-60	---	---	35-55	1.15-1.25	0.06-0.2	0.17-0.20	6.0-8.9	0.0-0.5	.28	.28			
Gothic	0-12	---	---	20-27	1.20-1.25	0.6-2	0.12-0.14	0.0-2.9	3.0-4.0	.10	.20	5	6	48
	12-17	---	---	35-40	1.25-1.40	0.06-0.2	0.13-0.16	3.0-5.9	1.0-2.0	.10	.20			
	17-42	---	---	35-55	1.15-1.20	0.06-0.2	0.14-0.18	6.0-8.9	1.0-2.0	.20	.20			
	42-60	---	---	35-55	1.15-1.20	0.06-0.2	0.12-0.18	6.0-8.9	0.5-1.0	.20	.20			
42:														
Cochetopa	0-19	---	---	20-27	1.10-1.15	0.6-2	0.16-0.18	0.0-2.9	3.0-4.0	.20	.20	5	6	48
	19-48	---	---	35-55	1.15-1.25	0.06-0.2	0.17-0.20	6.0-8.9	0.5-1.0	.20	.20			
	48-60	---	---	35-55	1.15-1.25	0.06-0.2	0.17-0.20	6.0-8.9	0.0-0.5	.28	.28			
Jerry	0-10	---	---	18-27	1.20-1.25	0.6-2	0.08-0.11	0.0-2.9	2.0-3.0	.10	.28	5	8	0
	10-31	---	---	40-50	1.15-1.20	0.06-0.2	0.14-0.18	6.0-8.9	0.5-1.0	.17	.17			
	31-60	---	---	35-50	1.20-1.25	0.06-0.2	0.14-0.18	6.0-8.9	0.0-1.0	.24	.24			
43:														
Coldspring, moist	0-14	---	---	15-20	1.10-1.20	0.6-2	0.15-0.18	0.0-2.9	3.0-4.0	.20	.20	3	5	56
	14-34	---	---	25-30	1.20-1.30	0.6-2	0.15-0.18	0.0-2.9	0.5-1.0	.28	.28			
	34-47	---	---	15-25	1.20-1.30	0.6-2	0.12-0.16	0.0-2.9	0.0-0.5	.15	.24			
	47-51	---	---	---	---	0.06-0.2	---	---	---	---	---			
44:														
Cowestglen	0-5	---	---	5-15	1.35-1.50	2-6	0.10-0.13	0.0-2.9	0.5-1.0	.28	.28	5	3	86
	5-42	---	---	5-18	1.25-1.60	2-6	0.11-0.14	0.0-2.9	0.5-1.0	.20	.20			
	42-60	---	---	5-15	1.20-1.25	2-6	0.11-0.14	0.0-2.9	0.0-0.5	.20	.20			
45:														
Coyet	0-6	---	---	5-12	1.45-1.55	2-6	0.08-0.11	0.0-2.9	0.5-1.0	.20	.20	5	2	134
	6-22	---	---	5-12	1.45-1.55	2-6	0.08-0.11	0.0-2.9	0.0-0.5	.24	.24			
	22-60	---	---	5-10	1.45-1.55	2-6	0.05-0.11	0.0-2.9	0.0-0.5	.24	.24			
46:														
Coyet	0-6	---	---	5-12	1.45-1.55	2-6	0.08-0.11	0.0-2.9	0.5-1.0	.20	.20	5	2	134
	6-22	---	---	5-12	1.45-1.55	2-6	0.08-0.11	0.0-2.9	0.0-0.5	.24	.24			
	22-60	---	---	5-10	1.45-1.55	2-6	0.05-0.11	0.0-2.9	0.0-0.5	.24	.24			
47:														
Coyet	0-3	---	---	5-12	1.45-1.55	2-6	0.08-0.11	0.0-2.9	0.5-1.0	.20	.20	4	2	134
	3-15	---	---	5-12	1.45-1.55	2-6	0.08-0.11	0.0-2.9	0.0-0.5	.24	.24			
	15-48	---	---	5-10	1.45-1.55	2-6	0.05-0.11	0.0-2.9	0.0-0.5	.24	.24			
	48-52	---	---	---	---	0.2-0.6	---	---	---	---	---			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
47:														
Crestman, moist-----	0-2	---	---	6-12	1.40-1.50	2-6	0.07-0.10	0.0-2.9	0.5-1.0	.20	.20	2	2	134
	2-14	---	---	3-12	1.50-1.60	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.24			
	14-18	---	---	---	---	0.06-0.2	---	---	---	---	---			
48:														
Crago----------	0-2	---	---	20-27	1.20-1.25	0.6-2	0.07-0.11	0.0-2.9	1.0-2.0	.10	.28	2	8	0
	2-57	---	---	20-30	1.25-1.35	0.6-2	0.05-0.09	0.0-2.9	0.0-0.5	.10	.28			
	57-60	---	---	18-27	1.30-1.40	0.6-2	0.05-0.09	0.0-2.9	0.0-0.5	.05	.28			
Pensore----------	0-2	---	---	18-25	1.25-1.35	0.6-2	0.09-0.13	0.0-2.9	1.0-2.0	.15	.28	1	4L	86
	2-7	---	---	18-25	1.25-1.35	0.6-2	0.09-0.13	0.0-2.9	1.0-2.0	.15	.28			
	7-17	---	---	18-25	1.20-1.30	0.6-2	0.06-0.09	0.0-2.9	0.0-0.5	.15	.43			
	17-21	---	---	---	---	0.2-0.6	---	---	---	---	---			
Grapit----------	0-3	---	---	20-25	1.20-1.30	0.6-2	0.10-0.14	0.0-2.9	2.0-3.0	.15	.28	2	4L	86
	3-38	---	---	20-30	1.30-1.40	0.2-0.6	0.08-0.12	0.0-2.9	0.5-1.0	.10	.24			
	38-60	---	---	15-30	1.30-1.40	0.2-0.6	0.08-0.12	0.0-2.9	0.0-0.5	.10	.28			
49:														
Cryoborolls, slumped----------	0-7	---	---	27-35	1.25-1.30	0.2-0.6	0.16-0.20	3.0-5.9	2.0-4.0	.17	.17	5	6	48
	7-35	---	---	20-45	1.20-1.35	0.06-0.2	0.14-0.16	3.0-5.9	1.0-3.0	.17	.17			
	35-60	---	---	20-45	1.20-1.35	0.06-0.2	0.14-0.16	3.0-5.9	0.5-1.0	.20	.20			
50:														
Cushool----------	0-5	---	---	10-18	1.30-1.35	2-6	0.13-0.16	0.0-2.9	1.0-2.0	.24	.24	3	3	86
	5-14	---	---	20-35	1.25-1.35	0.6-2	0.14-0.16	0.0-2.9	0.5-1.0	.20	.20			
	14-25	---	---	15-25	1.30-1.40	0.6-2	0.13-0.16	0.0-2.9	0.0-0.5	.28	.28			
	25-29	---	---	---	---	0.2-0.6	---	---	---	---	---			
51:														
Cushool----------	0-5	---	---	10-18	1.30-1.35	2-6	0.13-0.16	0.0-2.9	1.0-2.0	.24	.24	3	3	86
	5-14	---	---	20-35	1.25-1.35	0.6-2	0.14-0.16	0.0-2.9	0.5-1.0	.20	.20			
	14-25	---	---	15-25	1.30-1.40	0.6-2	0.13-0.16	0.0-2.9	0.0-0.5	.28	.28			
	25-29	---	---	---	---	0.2-0.6	---	---	---	---	---			
52:														
Danavore----------	0-4	---	---	14-20	1.35-1.45	2-6	0.04-0.07	0.0-2.9	0.5-1.0	.10	.28	3	8	0
	4-8	---	---	16-20	1.35-1.45	0.6-2	0.02-0.04	0.0-2.9	0.5-1.0	.05	.28			
	8-22	---	---	20-35	1.30-1.40	0.2-2	0.06-0.10	0.0-2.9	0.0-0.5	.05	.28			
	22-26	---	---	---	---	0.2-0.6	---	---	---	---	---			
Waybe----------	0-4	---	---	35-40	1.15-1.35	0.06-0.2	0.14-0.16	3.0-5.9	1.0-2.0	.15	.28	2	4L	86
	4-15	---	---	35-50	1.15-1.30	0.06-0.2	0.13-0.15	6.0-8.9	0.0-0.5	.32	.32			
	15-19	---	---	---	---	0.0000-0.0000	---	---	---	---	---			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
53:														
Davtone	0-6	---	---	18-25	1.15-1.25	0.6-2	0.16-0.18	0.0-2.9	2.0-4.0	.24	.24	5	6	48
	6-17	---	---	20-30	1.20-1.30	0.6-2	0.16-0.20	0.0-2.9	1.0-2.0	.24	.24			
	17-30	---	---	27-35	1.20-1.30	0.2-0.6	0.17-0.21	0.0-2.9	0.5-2.0	.15	.24			
	30-60	---	---	20-27	1.25-1.35	0.6-2	0.14-0.16	0.0-2.9	0.0-1.0	.20	.37			
Forsey	0-8	---	---	12-18	1.30-1.40	2-6	0.08-0.12	0.0-2.9	2.0-3.0	.15	.24	5	3	86
	8-24	---	---	18-27	1.25-1.35	0.6-2	0.06-0.10	0.0-2.9	0.5-1.0	.10	.28			
	24-60	---	---	12-18	1.35-1.45	2-6	0.04-0.06	0.0-2.9	0.5-1.0	.10	.28			
54:														
Deaver	0-2	---	---	35-40	1.15-1.25	0.06-0.2	0.13-0.16	0.0-2.9	0.5-1.0	.17	.32	3	4L	86
	2-30	---	---	40-50	1.15-1.25	0.06-0.2	0.14-0.16	6.0-8.9	0.0-0.5	.28	.28			
	30-34	---	---	---	---	0.06-0.2	---	---	---	---	---			
Avalon	0-3	---	---	18-27	1.10-1.15	0.6-2	0.16-0.18	0.0-2.9	0.5-1.0	.37	.37	5	4L	86
	3-12	---	---	27-35	1.25-1.30	0.2-0.6	0.13-0.16	0.0-2.9	0.0-0.5	.28	.28			
	12-60	---	---	27-35	1.25-1.30	0.2-0.6	0.13-0.16	0.0-2.9	0.0-0.5	.28	.28			
55:														
Deaver	0-2	---	---	35-40	1.05-1.15	0.06-0.2	0.19-0.21	3.0-5.9	0.5-1.0	.32	.32	3	4L	86
	2-35	---	---	40-50	1.15-1.25	0.06-0.2	0.14-0.16	6.0-8.9	0.0-0.5	.28	.28			
	35-39	---	---	---	---	0.06-0.2	---	---	---	---	---			
Chipeta	0-1	---	---	35-40	1.15-1.25	0.06-0.2	0.17-0.21	3.0-5.9	0.0-0.5	.37	.37	2	4L	86
	1-17	---	---	40-50	1.15-1.25	0.0015-0.06	0.14-0.17	6.0-8.9	0.0-0.5	.28	.28			
	17-21	---	---	---	---	0.06-0.2	---	---	---	---	---			
56:														
Debone	0-3	---	---	15-20	1.20-1.30	0.6-2	0.13-0.15	0.0-2.9	0.5-1.0	.37	.37	2	4L	86
	3-14	---	---	35-55	1.30-1.40	0.0015-0.06	0.06-0.10	6.0-8.9	0.0-0.5	.28	.28			
	14-35	---	---	20-35	1.30-1.40	0.2-0.6	0.07-0.12	3.0-5.9	0.0-0.5	.43	.43			
	35-60	---	---	5-20	1.35-1.50	0.6-2	0.10-0.15	0.0-2.9	0.0-0.5	.32	.32			
57:														
Detra	0-19	---	---	18-20	1.20-1.30	0.6-2	0.14-0.18	0.0-2.9	2.0-3.0	.24	.24	5	3	86
	19-50	---	---	22-32	1.20-1.30	0.6-2	0.14-0.16	3.0-5.9	1.0-2.0	.17	.17			
	50-60	---	---	18-27	1.25-1.35	0.6-2	0.14-0.16	0.0-2.9	0.5-1.0	.24	.24			
Cortyzack	0-9	---	---	16-20	1.25-1.30	2-6	0.13-0.15	0.0-2.9	2.0-3.0	.24	.24	5	3	86
	9-24	---	---	27-32	1.20-1.30	0.2-2	0.16-0.18	0.0-2.9	0.5-1.0	.20	.20			
	24-45	---	---	15-30	1.25-1.30	0.2-2	0.15-0.18	0.0-2.9	0.0-0.5	.24	.24			
	45-60	---	---	15-25	1.25-1.30	0.6-2	0.15-0.18	0.0-2.9	0.0-0.5	.24	.24			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
58:														
Diaflats	0-2	---	---	18-25	1.15-1.20	0.6-2	0.14-0.18	0.0-2.9	0.5-1.0	.37	.37	2	4L	86
	2-26	---	---	18-27	1.25-1.30	0.6-2	0.12-0.20	0.0-2.9	0.0-0.5	.43	.49			
	26-30	---	---	---	---	0.06-0.2	---	---	---	---	---			
Fondillas	0-5	---	---	10-20	1.20-1.25	0.6-2	0.16-0.18	0.0-2.9	0.0-1.0	.37	.37	1	4L	86
	5-11	---	---	18-27	1.20-1.25	0.6-2	0.05-0.08	0.0-2.9	0.0-1.0	.05	.37			
	11-15	---	---	---	---	0.06-0.2	---	---	---	---	---			
59:														
Dranyon	0-2	---	---	0-5	---	20-40	---	---	---	---	---	5	5	56
	2-19	---	---	15-25	1.15-1.25	0.6-2	0.16-0.19	0.0-2.9	2.0-4.0	.24	.24			
	19-34	---	---	27-35	1.25-1.35	0.2-0.6	0.11-0.13	0.0-2.9	0.5-1.0	.15	.24			
	34-60	---	---	25-30	1.25-1.35	0.6-2	0.11-0.13	0.0-2.9	0.5-1.0	.10	.20			
60:														
Dumps, mine	0-60	---	---	---	---	0.0000-0.0000	0.00-0.00	---	---	---	---	-	8	0
61:														
Ecklund	0-3	---	---	5-12	1.30-1.35	6-20	0.06-0.10	0.0-2.9	0.0-0.5	.32	.32	2	3	86
	3-24	---	---	5-12	1.30-1.35	2-6	0.06-0.10	0.0-2.9	0.0-0.5	.32	.32			
	24-36	---	---	3-12	1.30-1.35	2-6	0.05-0.09	0.0-2.9	0.0-0.5	.17	.32			
	36-40	---	---	---	---	0.06-0.2	---	---	---	---	---			
Tipperary	0-3	---	---	5-12	1.45-1.55	6-20	0.08-0.11	0.0-2.9	0.0-0.5	.32	.32	5	2	134
	3-60	---	---	0-10	1.45-1.55	6-20	0.06-0.09	0.0-2.9	0.0-0.5	.24	.24			
62:														
Eghelm	0-3	---	---	5-15	1.45-1.60	2-6	0.08-0.11	0.0-2.9	0.5-1.0	.28	.28	5	2	134
	3-52	---	---	10-18	1.25-1.30	2-6	0.08-0.12	0.0-2.9	0.0-0.5	.32	.32			
	52-60	---	---	10-20	1.20-1.35	2-6	0.14-0.20	0.0-2.9	0.0-0.5	.43	.43			
63:														
Eghelm, moist	0-6	---	---	5-15	1.45-1.60	6-20	0.06-0.08	0.0-2.9	0.5-1.0	.20	.20	5	2	134
	6-60	---	---	10-18	1.25-1.30	2-6	0.08-0.12	0.0-2.9	0.0-0.5	.32	.32			
64:														
Emlin	0-11	---	---	20-25	1.25-1.35	0.6-2	0.15-0.18	0.0-2.9	2.0-4.0	.24	.24	2	6	48
	11-19	---	---	25-35	1.30-1.45	0.2-0.6	0.16-0.21	3.0-5.9	0.5-1.0	.32	.32			
	19-60	---	---	25-30	1.30-1.40	0.2-0.6	0.11-0.19	0.0-2.9	0.0-1.0	.37	.37			
65:														
Emlin	0-7	---	---	20-25	1.25-1.35	0.6-2	0.15-0.18	0.0-2.9	2.0-4.0	.24	.24	2	6	48
	7-30	---	---	25-35	1.30-1.45	0.2-0.6	0.16-0.21	3.0-5.9	0.5-1.0	.32	.32			
	30-60	---	---	25-30	1.30-1.40	0.2-0.6	0.11-0.19	0.0-2.9	0.0-1.0	.37	.37			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
65:														
Tymosling	0-1	---	---	30-40	1.20-1.30	0.2-0.6	0.10-0.13	0.0-2.9	1.0-2.0	.05	.20	3	8	0
	1-5	---	---	30-40	1.25-1.40	0.2-0.6	0.13-0.16	3.0-5.9	1.0-2.0	.10	.20			
	5-14	---	---	35-50	1.20-1.30	0.06-0.2	0.16-0.18	6.0-8.9	0.5-1.0	.24	.24			
	14-35	---	---	40-55	1.25-1.35	0.0015-0.06	0.14-0.16	6.0-8.9	0.0-0.5	.17	.17			
	35-39	---	---	---	---	0.06-0.2	---	---	---	---	---			
66:														
Evanot	0-8	---	---	20-27	1.15-1.25	0.6-2	0.15-0.19	0.0-2.9	1.0-2.0	.28	.28	5	6	48
	8-20	---	---	28-35	1.25-1.35	0.2-0.6	0.17-0.21	0.0-2.9	0.5-1.0	.24	.24			
	20-33	---	---	28-35	1.25-1.35	0.2-0.6	0.15-0.18	0.0-2.9	0.0-0.5	.28	.28			
	33-60	---	---	20-27	1.30-1.40	0.6-2	0.13-0.16	0.0-2.9	0.0-0.5	.43	.43			
67:														
Evanot	0-8	---	---	20-27	1.15-1.25	0.6-2	0.15-0.19	0.0-2.9	1.0-2.0	.28	.28	5	6	48
	8-20	---	---	28-35	1.25-1.35	0.2-0.6	0.17-0.21	0.0-2.9	0.5-1.0	.24	.24			
	20-33	---	---	28-35	1.25-1.35	0.2-0.6	0.15-0.18	0.0-2.9	0.0-0.5	.28	.28			
	33-60	---	---	20-27	1.30-1.40	0.6-2	0.13-0.16	0.0-2.9	0.0-0.5	.43	.43			
68:														
Evanot	0-3	---	---	20-27	1.15-1.25	0.6-2	0.15-0.19	0.0-2.9	1.0-2.0	.28	.28	5	6	48
	3-22	---	---	28-35	1.25-1.35	0.2-0.6	0.17-0.21	0.0-2.9	0.5-1.0	.24	.24			
	22-60	---	---	20-27	1.30-1.40	0.6-2	0.13-0.16	0.0-2.9	0.0-0.5	.43	.43			
Yamo	0-3	---	---	18-27	1.20-1.30	0.6-2	0.14-0.17	0.0-2.9	1.0-2.0	.28	.28	5	4L	86
	3-14	---	---	20-30	1.30-1.40	0.6-2	0.16-0.19	0.0-2.9	0.5-1.0	.28	.28			
	14-60	---	---	18-27	1.30-1.40	0.6-2	0.13-0.16	0.0-2.9	0.0-0.5	.43	.43			
69:														
Fenster	0-2	---	---	20-27	1.15-1.25	0.6-2	0.17-0.19	0.0-2.9	0.5-1.0	.43	.43	5	4L	86
	2-11	---	---	20-30	1.20-1.30	0.6-2	0.15-0.17	0.0-2.9	0.5-1.0	.43	.43			
	11-60	---	---	20-30	1.20-1.30	0.6-2	0.15-0.17	0.0-2.9	0.5-1.0	.43	.43			
Thenipel	0-2	---	---	20-27	1.15-1.25	0.6-2	0.17-0.19	0.0-2.9	1.0-2.0	.37	.37	5	4L	86
	2-25	---	---	20-30	1.20-1.30	0.6-2	0.17-0.19	0.0-2.9	0.5-1.0	.43	.43			
	25-60	---	---	20-30	1.20-1.30	0.6-2	0.17-0.19	0.0-2.9	0.5-1.0	.43	.43			
70:														
Fluvaquents, frequently flooded	0-4	---	---	12-20	1.35-1.50	0.6-2	0.10-0.13	0.0-2.9	0.5-1.0	.28	.28	5	3	86
	4-60	---	---	0-45	1.20-1.50	0.2-20	0.05-0.19	0.0-2.9	0.0-0.5	.10	.20			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
70:														
Haplaquolls, frequently flooded	0-6	---	---	27-40	1.15-1.40	0.6-2	0.17-0.21	3.0-5.9	2.0-4.0	.17	.17	4	4L	56
	6-14	---	---	27-40	1.15-1.40	0.6-2	0.17-0.21	3.0-5.9	2.0-4.0	.17	.17			
	14-21	---	---	5-15	1.25-1.40	2-6	0.13-0.15	0.0-3.0	0.5-2.0	.28	.28			
	21-34	---	---	20-35	1.25-1.40	0.2-2	0.14-0.18	3.0-5.9	0.5-2.0	.24	.24			
	34-44	---	---	0-10	1.45-1.60	20-20	0.05-0.08	0.0-3.0	0.5-1.0	.17	.17			
	44-60	---	---	0-10	1.45-1.60	20-20	0.01-0.02	0.0-1.0	0.5-1.0	.02	.17			
71:														
Flygare, dry	0-1	---	---	0-5	---	---	---	---	---	---	---	4	6	48
	1-22	---	---	18-27	1.15-1.20	0.6-2	0.16-0.18	0.0-2.9	3.0-4.0	.20	.20			
	22-29	---	---	18-27	1.20-1.30	0.6-2	0.06-0.08	0.0-2.9	1.0-2.0	.10	.28			
	29-35	---	---	27-35	1.30-1.40	0.2-0.6	0.05-0.07	0.0-2.9	0.5-1.0	.10	.24			
	35-60	---	---	27-35	1.30-1.40	0.2-0.6	0.05-0.07	0.0-2.9	0.5-1.0	.05	.24			
72:														
Foidel, cool	0-2	---	---	0-5	---	---	---	---	---	---	---	5	6	48
	2-28	---	---	18-25	1.15-1.20	0.6-2	0.16-0.19	0.0-2.9	3.0-4.0	.20	.20			
	28-39	---	---	24-35	1.30-1.35	0.2-0.6	0.18-0.21	3.0-5.9	0.5-1.0	.32	.32			
	39-60	---	---	27-35	1.30-1.35	0.2-0.6	0.18-0.21	3.0-5.9	0.5-1.0	.24	.24			
73:														
Foidel	0-2	---	---	0-5	---	---	---	---	---	---	---	5	6	48
	2-28	---	---	18-25	1.15-1.20	0.6-2	0.16-0.19	0.0-2.9	3.0-4.0	.20	.20			
	28-39	---	---	24-35	1.30-1.35	0.2-0.6	0.18-0.21	3.0-5.9	0.5-1.0	.32	.32			
	39-60	---	---	27-35	1.30-1.35	0.2-0.6	0.18-0.21	3.0-5.9	0.5-1.0	.24	.24			
74:														
Foidel, moist	0-2	---	---	0-5	---	---	---	---	---	---	---	5	6	48
	2-23	---	---	18-25	1.15-1.20	0.6-2	0.16-0.19	0.0-2.9	3.0-4.0	.20	.20			
	23-38	---	---	24-35	1.30-1.35	0.2-0.6	0.18-0.21	3.0-5.9	0.5-1.0	.32	.32			
	38-60	---	---	27-35	1.30-1.35	0.2-0.6	0.18-0.21	3.0-5.9	0.5-1.0	.24	.24			
Flygare	0-1	---	---	0-5	---	---	---	---	---	---	---	4	6	48
	1-22	---	---	18-27	1.15-1.20	0.6-2	0.16-0.18	0.0-2.9	3.0-4.0	.20	.20			
	22-29	---	---	18-27	1.20-1.30	0.6-2	0.06-0.08	0.0-2.9	1.0-2.0	.10	.28			
	29-35	---	---	27-35	1.30-1.40	0.2-0.6	0.05-0.07	0.0-2.9	0.5-1.0	.10	.24			
	35-60	---	---	27-35	1.30-1.40	0.2-0.6	0.05-0.07	0.0-2.9	0.5-1.0	.05	.24			
Skyway, moist	0-20	---	---	10-20	1.35-1.50	2-6	0.10-0.14	0.0-2.9	1.0-6.0	.15	.15	2	3	86
	20-31	---	---	10-18	1.25-1.35	2-6	0.13-0.15	0.0-2.9	0.0-0.5	.28	.28			
	31-35	---	---	---	---	0.06-0.2	---	---	---	---	---			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
75:														
Fonce	0-3	---	---	10-14	1.20-1.30	2-6	0.10-0.11	0.0-2.9	0.5-1.0	.28	.28	3	3	86
	3-15	---	---	18-27	1.30-1.40	0.6-2	0.12-0.15	0.0-2.9	0.0-0.5	.24	.24			
	15-33	---	---	10-25	1.40-1.50	0.6-2	0.05-0.07	0.0-2.9	0.0-0.5	.10	.24			
	33-60	---	---	3-10	1.50-1.60	6-20	0.02-0.04	0.0-2.9	0.0-0.5	.05	.20			
76:														
Fonce	0-2	---	---	5-10	1.25-1.30	2-6	0.09-0.13	0.0-2.9	0.5-1.0	.15	.28	2	3	86
	2-16	---	---	20-25	1.20-1.25	0.6-2	0.12-0.16	0.0-2.9	0.5-1.0	.20	.20			
	16-30	---	---	10-20	1.30-1.35	6-20	0.03-0.09	0.0-2.9	0.0-0.5	.10	.32			
	30-60	---	---	5-15	1.35-1.45	6-20	0.02-0.08	0.0-2.9	0.0-0.5	.10	.32			
77:														
Forelle	0-5	---	---	15-27	1.25-1.35	0.6-2	0.16-0.18	0.0-2.9	0.5-1.0	.37	.37	5	6	48
	5-23	---	---	18-35	1.25-1.35	0.6-2	0.16-0.21	3.0-5.9	0.0-0.5	.37	.37			
	23-51	---	---	18-30	1.25-1.35	0.6-2	0.16-0.18	0.0-2.9	0.0-0.5	.37	.37			
	51-60	---	---	5-15	1.35-1.45	2-6	0.09-0.11	0.0-2.9	0.0-0.5	.32	.32			
78:														
Forelle	0-5	---	---	15-27	1.25-1.35	0.6-2	0.16-0.18	0.0-2.9	0.5-1.0	.37	.37	5	6	48
	5-23	---	---	18-35	1.25-1.35	0.6-2	0.16-0.21	3.0-5.9	0.0-0.5	.37	.37			
	23-51	---	---	18-30	1.25-1.35	0.6-2	0.16-0.18	0.0-2.9	0.0-0.5	.37	.37			
	51-60	---	---	5-15	1.35-1.45	2-6	0.09-0.11	0.0-2.9	0.0-0.5	.32	.32			
79:														
Forelle	0-5	---	---	15-27	1.25-1.35	0.6-2	0.16-0.18	0.0-2.9	0.5-1.0	.37	.37	5	6	48
	5-23	---	---	18-35	1.25-1.35	0.6-2	0.16-0.21	3.0-5.9	0.0-0.5	.37	.37			
	23-51	---	---	18-30	1.25-1.35	0.6-2	0.16-0.18	0.0-2.9	0.0-0.5	.37	.37			
	51-60	---	---	5-15	1.35-1.45	2-6	0.09-0.11	0.0-2.9	0.0-0.5	.32	.32			
Evanot	0-8	---	---	20-27	1.15-1.25	0.6-2	0.15-0.19	0.0-2.9	1.0-2.0	.28	.28	5	6	48
	8-20	---	---	28-35	1.25-1.35	0.2-0.6	0.17-0.21	0.0-2.9	0.5-1.0	.24	.24			
	20-33	---	---	28-35	1.25-1.35	0.2-0.6	0.15-0.18	0.0-2.9	0.0-0.5	.28	.28			
	33-60	---	---	20-27	1.30-1.40	0.6-2	0.13-0.16	0.0-2.9	0.0-0.5	.43	.43			
80:														
Forelle	0-5	---	---	15-27	1.25-1.35	0.6-2	0.16-0.18	0.0-2.9	0.5-1.0	.37	.37	5	6	48
	5-23	---	---	18-35	1.25-1.35	0.6-2	0.16-0.21	3.0-5.9	0.0-0.5	.37	.37			
	23-51	---	---	18-30	1.25-1.35	0.6-2	0.16-0.18	0.0-2.9	0.0-0.5	.37	.37			
	51-60	---	---	5-15	1.35-1.45	2-6	0.09-0.11	0.0-2.9	0.0-0.5	.32	.32			
Evanot	0-8	---	---	20-27	1.15-1.25	0.6-2	0.15-0.19	0.0-2.9	1.0-2.0	.28	.28	5	6	48
	8-20	---	---	28-35	1.25-1.35	0.2-0.6	0.17-0.21	0.0-2.9	0.5-1.0	.24	.24			
	20-33	---	---	28-35	1.25-1.35	0.2-0.6	0.15-0.18	0.0-2.9	0.0-0.5	.28	.28			
	33-60	---	---	20-27	1.30-1.40	0.6-2	0.13-0.16	0.0-2.9	0.0-0.5	.43	.43			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
81:														
Forelle	0-6	---	---	15-27	1.25-1.35	0.6-2	0.16-0.18	0.0-2.9	0.5-1.0	.37	.37	5	6	48
	6-30	---	---	18-35	1.25-1.35	0.6-2	0.16-0.21	3.0-5.9	0.0-0.5	.37	.37			
	30-60	---	---	18-30	1.25-1.35	0.6-2	0.16-0.18	0.0-2.9	0.0-0.5	.37	.37			
Obadia	0-1	---	---	10-18	1.30-1.40	2-6	0.13-0.15	0.0-2.9	1.0-2.0	.24	.24	2	3	86
	1-13	---	---	35-50	1.20-1.30	0.06-0.2	0.13-0.15	6.0-8.9	0.5-1.0	.24	.24			
	13-42	---	---	35-50	1.20-1.30	0.0015-0.06	0.13-0.15	6.0-8.9	0.5-1.0	.24	.24			
	42-60	---	---	27-40	1.25-1.35	0.2-0.6	0.13-0.15	3.0-5.9	0.5-1.0	.20	.20			
82:														
Forelle	0-5	---	---	15-27	1.25-1.35	0.6-2	0.16-0.18	0.0-2.9	0.5-1.0	.37	.37	5	6	48
	5-19	---	---	18-35	1.25-1.35	0.6-2	0.16-0.21	3.0-5.9	0.0-0.5	.37	.37			
	19-60	---	---	18-30	1.25-1.35	0.6-2	0.16-0.18	0.0-2.9	0.0-0.5	.37	.37			
Pinelli	0-3	---	---	16-22	1.20-1.30	0.6-2	0.16-0.18	0.0-2.9	0.5-2.0	.37	.37	5	5	56
	3-19	---	---	35-45	1.30-1.40	0.06-0.2	0.14-0.16	3.0-5.9	0.5-1.0	.24	.24			
	19-60	---	---	30-40	1.35-1.40	0.2-0.6	0.14-0.18	3.0-5.9	0.0-0.5	.28	.28			
Maysprings	0-2	---	---	5-10	1.40-1.45	2-6	0.05-0.07	0.0-2.9	1.0-2.0	.10	.10	3	2	134
	2-14	---	---	18-27	1.25-1.30	0.6-2	0.12-0.16	0.0-2.9	0.5-1.0	.24	.24			
	14-20	---	---	10-18	1.40-1.45	2-6	0.09-0.11	0.0-2.9	0.0-0.5	.28	.28			
	20-60	---	---	0-10	1.45-1.50	6-20	0.03-0.07	0.0-2.9	0.0-0.5	.10	.10			
83:														
Forsey	0-8	---	---	12-18	1.30-1.40	2-6	0.08-0.12	0.0-2.9	2.0-3.0	.15	.24	5	3	86
	8-24	---	---	18-27	1.25-1.35	0.6-2	0.06-0.10	0.0-2.9	0.5-1.0	.10	.28			
	24-60	---	---	12-18	1.35-1.45	2-6	0.04-0.06	0.0-2.9	0.5-1.0	.10	.28			
Libeg	0-5	---	---	10-20	1.25-1.30	0.6-2	0.14-0.19	0.0-2.9	2.0-3.0	.28	.28	5	5	56
	5-12	---	---	10-20	1.25-1.40	0.6-2	0.10-0.13	0.0-2.9	2.0-3.0	.15	.28			
	12-35	---	---	20-30	1.25-1.30	0.6-2	0.07-0.10	0.0-2.9	0.5-1.0	.05	.20			
	35-60	---	---	10-25	1.35-1.45	0.6-2	0.04-0.07	0.0-2.9	0.0-0.5	.05	.24			
84:														
Gebson, moist	0-2	---	---	10-20	1.35-1.45	2-6	0.05-0.08	0.0-2.9	2.0-4.0	.05	.20	5	8	0
	2-7	---	---	20-30	1.25-1.35	0.6-2	0.07-0.10	0.0-2.9	2.0-4.0	.05	.15			
	7-13	---	---	20-30	1.25-1.35	0.6-2	0.10-0.14	0.0-2.9	1.0-2.0	.10	.17			
	13-24	---	---	20-30	1.25-1.35	0.6-2	0.11-0.16	0.0-2.9	0.5-1.0	.10	.20			
	24-60	---	---	10-25	1.25-1.40	0.6-2	0.11-0.16	0.0-2.9	0.0-0.5	.15	.24			
Youga	0-10	---	---	10-20	1.20-1.30	2-6	0.13-0.15	0.0-2.9	3.0-4.0	.15	.15	5	3	86
	10-16	---	---	20-27	1.25-1.35	0.6-2	0.14-0.17	0.0-2.9	0.5-1.0	.20	.20			
	16-50	---	---	18-25	1.30-1.40	2-6	0.13-0.16	0.0-2.9	0.0-0.5	.24	.24			
	50-60	---	---	15-20	1.30-1.40	2-6	0.13-0.15	0.0-2.9	0.0-0.5	.32	.32			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
85:														
Giarch	0-2	---	---	12-18	1.25-1.35	2-6	0.13-0.15	0.0-2.9	0.5-1.0	.28	.28	2	3	86
	2-18	---	---	35-45	1.20-1.30	0.0015-0.06	0.11-0.14	6.0-8.9	0.5-1.0	.24	.24			
	18-58	---	---	20-35	1.30-1.40	0.06-0.2	0.11-0.14	3.0-5.9	0.5-1.0	.32	.32			
	58-60	---	---	0-7	1.45-1.55	6-20	0.05-0.08	0.0-2.9	0.5-1.0	.17	.17			
86:														
Gracot	0-5	---	---	8-12	1.25-1.30	6-20	0.03-0.05	0.0-2.9	0.5-1.0	.05	.20	5	8	0
	5-16	---	---	5-12	1.30-1.35	6-20	0.02-0.05	0.0-2.9	0.0-0.5	.05	.24			
	16-60	---	---	3-8	1.30-1.35	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.24	.24			
Maybell	0-3	---	---	4-7	1.40-1.50	6-20	0.08-0.10	0.0-2.9	1.0-2.0	.15	.15	5	1	220
	3-15	---	---	6-11	1.50-1.70	6-20	0.08-0.10	0.0-2.9	0.0-0.5	.28	.28			
	15-60	---	---	3-9	1.50-1.70	6-20	0.05-0.10	0.0-2.9	0.0-0.5	.32	.32			
87:														
Gretdivid	0-3	---	---	5-10	1.40-1.50	6-20	0.05-0.07	0.0-2.9	0.5-1.0	.15	.15	5	2	134
	3-7	---	---	14-25	1.30-1.40	0.6-2	0.14-0.16	0.0-2.9	0.5-1.0	.20	.20			
	7-60	---	---	4-8	1.45-1.55	6-20	0.04-0.06	0.0-2.9	0.0-0.5	.05	.10			
Taffom	0-6	---	---	10-15	1.30-1.40	2-6	0.09-0.12	0.0-2.9	1.0-2.0	.20	.20	5	3	86
	6-43	---	---	20-30	1.30-1.40	0.6-2	0.14-0.18	0.0-2.9	0.0-0.5	.24	.24			
	43-60	---	---	5-20	1.30-1.40	2-6	0.03-0.07	0.0-2.9	0.0-0.5	.28	.28			
Abor	0-6	---	---	40-50	1.15-1.25	0.0015-0.06	0.13-0.16	6.0-8.9	1.0-2.0	.15	.15	3	4	86
	6-31	---	---	50-60	1.25-1.35	0.0015-0.06	0.13-0.16	6.0-8.9	0.5-1.0	.24	.24			
	31-35	---	---	---	---	0.06-0.2	---	---	---	---	---			
88:														
Grieves	0-2	---	---	5-12	1.40-1.50	2-6	0.08-0.11	0.0-2.9	0.5-1.0	.28	.28	5	2	134
	2-30	---	---	8-18	1.45-1.55	2-6	0.10-0.15	0.0-2.9	0.0-0.5	.32	.32			
	30-60	---	---	12-18	1.45-1.55	2-6	0.10-0.15	0.0-2.9	0.0-0.5	.32	.32			
89:														
Grieves	0-2	---	---	5-12	1.40-1.50	2-6	0.08-0.11	0.0-2.9	0.5-1.0	.28	.28	5	2	134
	2-30	---	---	8-18	1.45-1.55	2-6	0.10-0.15	0.0-2.9	0.0-0.5	.32	.32			
	30-60	---	---	12-18	1.45-1.55	2-6	0.10-0.15	0.0-2.9	0.0-0.5	.32	.32			
90:														
Grieves	0-2	---	---	5-12	1.40-1.50	2-6	0.08-0.11	0.0-2.9	0.5-1.0	.28	.28	5	2	134
	2-30	---	---	8-18	1.45-1.55	2-6	0.10-0.15	0.0-2.9	0.0-0.5	.32	.32			
	30-60	---	---	12-18	1.45-1.55	2-6	0.10-0.15	0.0-2.9	0.0-0.5	.32	.32			
Crestman	0-2	---	---	6-12	1.40-1.50	2-6	0.07-0.10	0.0-2.9	0.5-1.0	.20	.20	2	2	134
	2-14	---	---	3-12	1.50-1.60	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.24			
	14-18	---	---	---	---	0.06-0.2	---	---	---	---	---			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
91:														
Grieves	0-2	---	---	5-12	1.40-1.50	2-6	0.07-0.10	0.0-2.9	0.5-1.0	.20	.20	5	2	134
	2-60	---	---	12-18	1.45-1.55	2-6	0.10-0.15	0.0-2.9	0.0-0.5	.32	.32			
Yamo	0-5	---	---	27-35	1.20-1.30	0.6-2	0.15-0.18	0.0-2.9	0.5-1.0	.24	.24	5	4L	86
	5-60	---	---	20-30	1.30-1.40	0.6-2	0.16-0.19	0.0-2.9	0.0-0.5	.32	.32			
Crestman	0-2	---	---	6-12	1.40-1.50	2-6	0.07-0.10	0.0-2.9	0.5-1.0	.20	.20	2	2	134
	2-14	---	---	3-12	1.50-1.60	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.24			
	14-18	---	---	---	---	0.06-0.2	---	---	---	---	---			
92:														
Grimm	0-4	---	---	10-15	1.35-1.45	6-20	0.03-0.05	0.0-2.9	1.0-2.0	.02	.17	5	8	0
	4-13	---	---	10-15	1.45-1.55	6-20	0.03-0.05	0.0-2.9	0.5-1.0	.05	.20			
	13-18	---	---	5-10	1.35-1.60	6-20	0.07-0.13	0.0-2.9	0.5-1.0	.17	.17			
	18-60	---	---	5-10	1.45-1.55	6-20	0.03-0.05	0.0-2.9	0.5-1.0	.05	.17			
Ustic Torriorthents, shallow	0-7	---	---	10-20	1.35-1.40	2-6	0.05-0.07	0.0-2.9	0.5-2.0	.10	.28	2	8	0
	7-18	---	---	15-45	1.15-1.35	0.2-2	0.10-0.16	0.0-2.9	0.5-1.0	.24	.24			
	18-22	---	---	---	---	0.06-2	---	---	---	---	---			
93:														
Gullied land	0-60	---	---	---	---	0.0000-0.0000	0.00-0.00	---	---	---	---	-	8	0
94:														
Hapney, moist	0-2	---	---	10-18	1.10-1.20	2-6	0.14-0.16	0.0-2.9	1.0-2.0	.24	.24	2	3	86
	2-15	---	---	35-45	1.20-1.30	0.06-0.2	0.14-0.17	6.0-8.9	1.0-2.0	.20	.20			
	15-50	---	---	27-40	1.25-1.35	0.06-0.2	0.12-0.15	3.0-5.9	0.0-0.5	.32	.32			
	50-60	---	---	24-35	1.25-1.35	0.2-0.6	0.15-0.18	3.0-5.9	0.0-0.5	.28	.28			
95:														
Haterton	0-2	---	---	18-27	1.15-1.30	0.6-2	0.16-0.18	0.0-2.9	0.5-1.0	.37	.37	2	4L	86
	2-16	---	---	18-27	1.25-1.35	0.6-2	0.10-0.16	0.0-2.9	0.0-0.5	.24	.43			
	16-20	---	---	---	---	0.2-0.6	---	---	---	---	---			
Piezon	0-2	---	---	18-27	1.25-1.40	0.6-2	0.16-0.18	0.0-2.9	1.0-2.0	.28	.28	3	4L	86
	2-13	---	---	18-27	1.25-1.40	0.6-2	0.16-0.19	0.0-2.9	0.5-1.0	.37	.37			
	13-23	---	---	18-27	1.25-1.40	0.6-2	0.15-0.19	0.0-2.9	0.0-0.5	.24	.43			
	23-27	---	---	---	---	0.06-2	---	---	---	---	---			
96:														
Heathcoat	0-13	---	---	20-27	1.15-1.25	0.6-2	0.14-0.16	0.0-2.9	2.0-4.0	.15	.24	5	6	48
	13-29	---	---	35-45	1.25-1.30	0.06-0.2	0.16-0.18	3.0-5.9	0.5-1.0	.24	.24			
	29-60	---	---	27-35	1.25-1.35	0.2-0.6	0.14-0.16	0.0-2.9	0.5-1.0	.20	.20			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
97:														
Heathcoat	0-6	---	---	20-27	1.15-1.25	0.6-2	0.16-0.18	0.0-2.9	2.0-4.0	.24	.24	5	6	48
	6-22	---	---	35-45	1.25-1.30	0.06-0.2	0.16-0.18	3.0-5.9	0.5-1.0	.24	.24			
	22-60	---	---	30-45	1.25-1.30	0.06-0.2	0.14-0.16	3.0-5.9	0.5-1.0	.24	.24			
Clayburn	0-15	---	---	20-27	1.15-1.20	0.6-2	0.16-0.18	0.0-2.9	2.0-3.0	.28	.28	5	6	48
	15-44	---	---	27-35	1.25-1.30	0.2-0.6	0.17-0.20	3.0-5.9	1.0-2.0	.20	.20			
	44-60	---	---	24-30	1.30-1.35	0.6-2	0.15-0.17	0.0-2.9	0.0-0.5	.37	.37			
98:														
Herm	0-10	---	---	27-35	1.15-1.25	0.2-0.6	0.12-0.15	0.0-2.9	2.0-4.0	.10	.17	5	6	48
	10-18	---	---	40-50	1.20-1.30	0.06-0.2	0.10-0.20	3.0-5.9	1.0-2.0	.10	.15			
	18-45	---	---	40-50	1.20-1.30	0.06-0.2	0.12-0.16	6.0-8.9	0.0-1.0	.17	.17			
	45-60	---	---	40-50	1.20-1.30	0.06-0.2	0.12-0.16	6.0-8.9	0.0-1.0	.17	.17			
Fughes	0-19	---	---	20-27	1.20-1.25	0.6-2	0.11-0.15	0.0-2.9	2.0-3.0	.15	.28	5	6	48
	19-46	---	---	45-55	1.15-1.20	0.06-0.2	0.10-0.15	6.0-8.9	0.5-2.0	.20	.20			
	46-60	---	---	45-55	1.15-1.20	0.06-0.2	0.10-0.15	6.0-8.9	0.0-1.0	.20	.20			
99:														
Hesperus, dry	0-5	---	---	16-20	1.25-1.30	2-6	0.13-0.15	0.0-2.9	2.0-3.0	.24	.24	5	3	86
	5-20	---	---	24-30	1.15-1.25	0.6-2	0.17-0.20	0.0-2.9	2.0-3.0	.28	.28			
	20-52	---	---	27-35	1.20-1.30	0.2-0.6	0.17-0.20	3.0-5.9	0.5-1.0	.24	.24			
	52-60	---	---	20-35	1.20-1.30	0.2-0.6	0.17-0.20	0.0-2.9	0.0-0.5	.43	.43			
100:														
Hesperus	0-12	---	---	18-25	1.20-1.25	0.6-2	0.16-0.18	0.0-2.9	2.0-3.0	.28	.28	5	6	48
	12-45	---	---	27-35	1.20-1.30	0.2-0.6	0.17-0.20	3.0-5.9	0.5-1.0	.24	.24			
	45-60	---	---	24-33	1.20-1.30	0.2-0.6	0.17-0.20	0.0-2.9	0.0-0.5	.43	.43			
101:														
Hesperus	0-12	---	---	18-25	1.20-1.25	0.6-2	0.16-0.18	0.0-2.9	2.0-3.0	.28	.28	5	6	48
	12-45	---	---	27-35	1.20-1.30	0.2-0.6	0.17-0.20	3.0-5.9	0.5-1.0	.24	.24			
	45-60	---	---	24-33	1.20-1.30	0.2-0.6	0.17-0.20	0.0-2.9	0.0-0.5	.43	.43			
102:														
Holter	0-10	---	---	14-18	1.25-1.30	2-6	0.06-0.10	0.0-2.9	2.0-3.0	.10	.24	5	8	0
	10-23	---	---	27-34	1.30-1.40	0.2-0.6	0.07-0.13	0.0-2.9	1.0-2.0	.10	.24			
	23-60	---	---	23-30	1.35-1.45	0.6-2	0.05-0.09	0.0-2.9	0.0-1.0	.05	.37			
Detra	0-15	---	---	18-25	1.20-1.30	0.6-2	0.13-0.18	0.0-2.9	2.0-4.0	.24	.24	4	6	48
	15-36	---	---	27-35	1.30-1.40	0.2-0.6	0.14-0.21	3.0-5.9	1.0-2.0	.20	.20			
	36-60	---	---	23-28	1.30-1.40	2-6	0.07-0.10	0.0-2.9	0.5-1.0	.05	.20			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
103:														
Iles	0-5	---	---	20-27	1.25-1.35	0.6-2	0.16-0.18	0.0-2.9	2.0-3.0	.28	.28	3	5	56
	5-25	---	---	35-50	1.30-1.40	0.06-0.2	0.16-0.18	6.0-8.9	0.5-1.0	.24	.24			
	25-36	---	---	30-40	1.35-1.40	0.06-0.2	0.14-0.16	3.0-5.9	0.0-0.5	.37	.37			
	36-60	---	---	20-27	1.35-1.40	0.2-2	0.13-0.15	0.0-2.9	0.0-0.5	.43	.43			
104:														
Ironco	0-10	---	---	15-25	1.25-1.40	2-6	0.06-0.08	0.0-2.9	2.0-4.0	.10	.24	5	8	0
	10-60	---	---	25-32	1.20-1.40	0.6-2	0.06-0.09	0.0-2.9	0.5-2.0	.10	.24			
Mulgon, dry	0-1	---	---	0-5	---	---	---	---	---	---	---	5	8	0
	1-16	---	---	15-20	1.35-1.45	2-6	0.06-0.08	0.0-2.9	2.0-4.0	.05	.20			
	16-32	---	---	25-32	1.20-1.30	0.2-0.6	0.06-0.09	0.0-2.9	0.0-1.0	.10	.24			
	32-60	---	---	25-32	1.20-1.30	0.2-0.6	0.06-0.09	0.0-2.9	0.0-1.0	.05	.20			
105:														
Ironsprings	0-14	---	---	5-10	1.45-1.55	2-6	0.06-0.08	0.0-2.9	1.0-2.0	.15	.15	5	2	134
	14-40	---	---	10-18	1.35-1.45	2-6	0.09-0.13	0.0-2.9	0.5-1.0	.24	.24			
	40-60	---	---	3-8	1.45-1.55	2-6	0.03-0.08	0.0-2.9	0.0-0.5	.10	.10			
106:														
Ironsprings	0-10	---	---	5-10	1.45-1.55	2-6	0.06-0.08	0.0-2.9	1.0-2.0	.15	.15	5	2	134
	10-36	---	---	10-18	1.35-1.45	2-6	0.09-0.13	0.0-2.9	0.5-1.0	.24	.24			
	36-60	---	---	3-8	1.45-1.55	2-6	0.03-0.08	0.0-2.9	0.0-0.5	.10	.10			
107:														
Ironsprings	0-14	---	---	5-10	1.45-1.55	2-6	0.05-0.07	0.0-2.9	1.0-2.0	.10	.10	5	2	134
	14-40	---	---	10-18	1.35-1.45	2-6	0.09-0.13	0.0-2.9	0.5-1.0	.24	.24			
	40-60	---	---	3-8	1.45-1.55	2-6	0.03-0.08	0.0-2.9	0.0-0.5	.10	.10			
Maysprings	0-3	---	---	5-10	1.40-1.45	2-6	0.05-0.07	0.0-2.9	1.0-2.0	.10	.10	3	2	134
	3-26	---	---	18-27	1.25-1.30	0.6-2	0.12-0.16	0.0-2.9	0.5-1.0	.24	.24			
	26-36	---	---	10-18	1.40-1.45	2-6	0.09-0.11	0.0-2.9	0.0-0.5	.28	.28			
	36-60	---	---	0-10	1.45-1.50	6-20	0.03-0.07	0.0-2.9	0.0-0.5	.10	.10			
Gretdivid	0-3	---	---	5-10	1.40-1.50	6-20	0.05-0.07	0.0-2.9	0.5-1.0	.15	.15	5	2	134
	3-7	---	---	14-25	1.30-1.40	0.6-2	0.14-0.16	0.0-2.9	0.5-1.0	.20	.20			
	7-60	---	---	4-8	1.45-1.55	6-20	0.04-0.06	0.0-2.9	0.0-0.5	.05	.10			
108:														
Jerry	0-2	---	---	0-5	---	---	---	---	---	---	---	5	6	48
	2-12	---	---	23-27	1.20-1.25	0.6-2	0.15-0.19	0.0-2.9	2.0-3.0	.28	.28			
	12-23	---	---	30-38	1.15-1.20	0.2-0.6	0.17-0.21	3.0-5.9	2.0-3.0	.20	.20			
	23-29	---	---	35-45	1.15-1.20	0.0015-0.06	0.14-0.18	6.0-8.9	0.5-1.0	.28	.28			
	29-60	---	---	35-50	1.20-1.25	0.0015-0.06	0.14-0.18	6.0-8.9	0.0-1.0	.28	.28			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
108:														
Cochetopa	0-19	---	---	20-27	1.10-1.15	0.6-2	0.16-0.18	0.0-2.9	3.0-4.0	.20	.20	5	6	48
	19-48	---	---	35-55	1.15-1.25	0.06-0.2	0.17-0.20	6.0-8.9	0.5-1.0	.20	.20			
	48-60	---	---	35-55	1.15-1.25	0.06-0.2	0.17-0.20	6.0-8.9	0.0-0.5	.28	.28			
109:														
Joebas	0-7	---	---	10-20	1.25-1.35	2-6	0.08-0.10	0.0-2.9	1.0-2.0	.15	.24	1	3	86
	7-13	---	---	20-27	1.25-1.35	0.6-2	0.10-0.13	0.0-2.9	0.5-1.0	.10	.20			
	13-16	---	---	18-25	1.30-1.40	0.6-2	0.10-0.13	0.0-2.9	0.5-1.0	.10	.20			
	16-20	---	---	---	---	0.0000-0.0000	---	---	---	---	---			
Rock outcrop	0-60	---	---	0-0	---	0.0000-0.0000	0.00-0.00	---	---	---	---	-	8	0
110:														
Kemmerer	0-3	---	---	35-40	1.15-1.20	0.06-0.2	0.17-0.21	0.0-2.9	0.5-1.0	.32	.32	3	4L	86
	3-22	---	---	40-50	1.20-1.30	0.0015-0.06	0.14-0.18	6.0-8.9	0.0-0.5	.28	.28			
	22-26	---	---	---	---	0.06-0.2	---	---	---	---	---			
111:														
Kemmerer	0-8	---	---	28-35	1.25-1.40	0.2-0.6	0.05-0.11	0.0-2.9	0.5-1.0	.10	.24	3	8	0
	8-27	---	---	40-50	1.20-1.30	0.0015-0.06	0.14-0.18	6.0-8.9	0.0-0.5	.28	.28			
	27-31	---	---	---	---	0.06-0.2	---	---	---	---	---			
Grapit	0-3	---	---	15-20	1.35-1.45	2-6	0.03-0.07	0.0-2.9	2.0-3.0	.10	.24	2	8	0
	3-35	---	---	20-30	1.30-1.40	0.6-2	0.08-0.12	0.0-2.9	0.5-1.0	.10	.24			
	35-60	---	---	15-30	1.30-1.40	0.6-2	0.08-0.12	0.0-2.9	0.0-0.5	.10	.28			
112:														
Kemmerer	0-3	---	---	35-40	1.15-1.20	0.06-0.2	0.17-0.21	0.0-2.9	0.5-1.0	.32	.32	3	4L	86
	3-22	---	---	40-50	1.20-1.30	0.0015-0.06	0.14-0.18	6.0-8.9	0.0-0.5	.28	.28			
	22-26	---	---	---	---	0.06-0.2	---	---	---	---	---			
Moyerson	0-1	---	---	35-40	1.10-1.20	0.06-0.2	0.16-0.18	3.0-5.9	0.5-1.0	.32	.32	2	4L	86
	1-17	---	---	40-50	1.15-1.25	0.06-0.2	0.11-0.14	6.0-8.9	0.5-1.0	.24	.24			
	17-21	---	---	---	---	0.06-0.2	---	---	---	---	---			
113:														
Kemmerer	0-3	---	---	35-40	1.15-1.20	0.06-0.2	0.17-0.21	0.0-2.9	0.5-1.0	.32	.32	3	4L	86
	3-22	---	---	35-50	1.20-1.30	0.0015-0.06	0.14-0.18	6.0-8.9	0.0-0.5	.28	.28			
	22-26	---	---	---	---	0.06-0.2	---	---	---	---	---			
Yamo	0-5	---	---	18-27	1.20-1.30	0.6-2	0.14-0.17	0.0-2.9	1.0-2.0	.28	.28	5	4L	86
	5-15	---	---	20-30	1.30-1.40	0.6-2	0.16-0.19	0.0-2.9	0.5-1.0	.28	.28			
	15-38	---	---	20-30	1.30-1.40	0.6-2	0.16-0.19	0.0-2.9	0.0-0.5	.32	.32			
	38-60	---	---	18-27	1.30-1.40	0.6-2	0.13-0.16	0.0-2.9	0.0-0.5	.43	.43			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
114:														
Lamphier	0-2	---	---	0-5	---	---	---	---	---	---	---	5	3	86
	2-24	---	---	15-20	1.25-1.30	2-6	0.13-0.15	0.0-2.9	2.0-3.0	.24	.24			
	24-60	---	---	20-27	1.25-1.40	0.6-2	0.14-0.18	0.0-2.9	0.5-1.0	.24	.24			
115:														
Lamphier	0-2	---	---	0-5	---	---	---	---	---	---	---	5	3	86
	2-24	---	---	15-20	1.25-1.30	2-6	0.13-0.15	0.0-2.9	2.0-3.0	.24	.24			
	24-60	---	---	20-27	1.25-1.40	0.6-2	0.14-0.18	0.0-2.9	0.5-1.0	.24	.24			
116:														
Lamphier	0-2	---	---	0-5	---	---	---	---	---	---	---	5	3	86
	2-24	---	---	15-20	1.25-1.30	2-6	0.13-0.15	0.0-2.9	2.0-3.0	.24	.24			
	24-60	---	---	20-27	1.25-1.40	0.6-2	0.14-0.18	0.0-2.9	0.5-1.0	.24	.24			
Jerry	0-10	---	---	23-27	1.20-1.25	0.6-2	0.15-0.19	0.0-2.9	2.0-3.0	.28	.28	5	6	48
	10-21	---	---	30-38	1.15-1.20	0.2-0.6	0.17-0.21	3.0-5.9	2.0-3.0	.20	.20			
	21-27	---	---	35-45	1.15-1.20	0.0015-0.06	0.14-0.18	6.0-8.9	0.5-1.0	.28	.28			
	27-60	---	---	35-50	1.20-1.25	0.0015-0.06	0.14-0.18	6.0-8.9	0.0-1.0	.28	.28			
117:														
Lamphier	0-2	---	---	0-5	---	---	---	---	---	---	---	5	3	86
	2-24	---	---	15-20	1.25-1.30	2-6	0.13-0.15	0.0-2.9	2.0-3.0	.24	.24			
	24-60	---	---	20-27	1.25-1.40	0.6-2	0.14-0.18	0.0-2.9	0.5-1.0	.24	.24			
Jerry	0-10	---	---	23-27	1.20-1.25	0.6-2	0.15-0.19	0.0-2.9	2.0-3.0	.28	.28	5	6	48
	10-21	---	---	30-38	1.15-1.20	0.2-0.6	0.17-0.21	3.0-5.9	2.0-3.0	.20	.20			
	21-27	---	---	35-45	1.15-1.20	0.0015-0.06	0.14-0.18	6.0-8.9	0.5-1.0	.28	.28			
	27-60	---	---	35-50	1.20-1.25	0.0015-0.06	0.14-0.18	6.0-8.9	0.0-1.0	.28	.28			
118:														
Lander	0-10	---	---	18-27	1.20-1.30	0.6-2	0.17-0.19	0.0-2.9	2.0-3.0	.28	.28	4	6	48
	10-44	---	---	15-35	1.20-1.35	0.2-0.6	0.17-0.19	3.0-5.9	0.5-1.0	.28	.28			
	44-55	---	---	0-5	1.55-1.65	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.28	.28			
	55-60	---	---	0-5	1.55-1.65	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.20	.20			
119:														
Langspring	0-3	---	---	10-20	1.35-1.50	0.6-2	0.13-0.15	0.0-2.9	0.5-1.0	.28	.28	2	3	86
	3-17	---	---	18-27	1.20-1.30	0.6-2	0.13-0.16	0.0-2.9	0.0-0.5	.32	.32			
	17-60	---	---	18-30	1.25-1.35	0.6-2	0.13-0.16	0.0-2.9	0.0-0.5	.32	.32			
120:														
Layoint	0-14	---	---	5-10	1.50-1.60	2-6	0.09-0.12	0.0-2.9	1.0-2.0	.24	.24	2	2	134
	14-32	---	---	5-10	1.50-1.60	2-6	0.09-0.12	0.0-2.9	0.5-1.0	.28	.28			
	32-36	---	---	---	---	0.06-0.2	---	---	---	---	---			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
120:														
Moosed	0-7	---	---	3-10	1.50-1.60	2-6	0.06-0.11	0.0-2.9	1.0-3.0	.24	.24	1	2	134
	7-15	---	---	3-10	1.60-1.70	6-20	0.06-0.11	0.0-2.9	0.5-1.0	.24	.24			
	15-18	---	---	3-10	1.50-1.60	6-20	0.03-0.08	0.0-2.9	0.0-0.5	.15	.24			
	18-22	---	---	---	---	0.06-0.2	---	---	---	---	---			
Berlake	0-8	---	---	12-18	1.25-1.30	2-6	0.13-0.15	0.0-2.9	2.0-3.0	.24	.24	5	3	86
	8-42	---	---	20-30	1.25-1.35	0.6-2	0.14-0.18	0.0-2.9	0.5-1.0	.20	.20			
	42-60	---	---	15-25	1.30-1.40	0.6-2	0.12-0.16	0.0-2.9	0.0-0.5	.24	.24			
121:														
Leaps	0-1	---	---	0-5	---	20-40	---	---	---	---	---	5	6	48
	1-15	---	---	27-35	1.15-1.25	0.2-0.6	0.17-0.20	3.0-5.9	3.0-6.0	.15	.15			
	15-39	---	---	35-55	1.20-1.30	0.0015-0.06	0.14-0.17	6.0-8.9	0.5-1.0	.24	.24			
	39-60	---	---	35-55	1.20-1.30	0.0015-0.06	0.14-0.17	6.0-8.9	0.0-0.5	.24	.24			
122:														
Leswill	0-5	---	---	27-35	1.20-1.30	0.2-0.6	0.17-0.20	0.0-2.9	0.5-1.0	.24	.24	5	4L	86
	5-14	---	---	27-32	1.25-1.35	0.2-0.6	0.17-0.21	0.0-2.9	0.0-0.5	.37	.37			
	14-41	---	---	27-35	1.25-1.35	0.2-0.6	0.17-0.21	0.0-2.9	0.0-0.5	.37	.37			
	41-75	---	---	27-35	1.25-1.35	0.2-0.6	0.17-0.21	0.0-2.9	0.0-0.5	.28	.28			
Rogrube	0-3	---	---	15-25	1.20-1.30	0.6-2	0.14-0.18	0.0-2.9	0.5-1.0	.37	.37	5	4L	86
	3-28	---	---	27-35	1.25-1.35	0.2-0.6	0.17-0.21	0.0-2.9	0.0-0.5	.37	.37			
	28-60	---	---	20-35	1.30-1.40	0.2-0.6	0.12-0.17	0.0-2.9	0.0-0.5	.37	.37			
123:														
Lilsnake	0-4	---	---	18-27	1.15-1.20	0.6-2	0.14-0.16	0.0-2.9	0.0-0.5	.43	.43	1	4L	86
	4-15	---	---	18-27	1.25-1.40	0.6-2	0.14-0.18	0.0-2.9	0.0-0.5	.43	.43			
	15-19	---	---	18-30	1.25-1.35	0.6-2	0.12-0.14	0.0-2.9	0.0-0.5	.24	.43			
	19-23	---	---	---	---	0.06-0.2	---	---	---	---	---			
Sandwash	0-4	---	---	18-27	1.30-1.35	0.6-2	0.16-0.18	0.0-2.9	0.0-1.0	.37	.37	2	4L	86
	4-16	---	---	18-30	1.35-1.45	0.6-2	0.13-0.16	0.0-2.9	0.0-0.5	.32	.32			
	16-35	---	---	18-30	1.40-1.50	0.6-2	0.04-0.07	0.0-2.9	0.0-0.5	.05	.37			
	35-39	---	---	---	---	0.06-0.6	---	---	---	---	---			
124:														
Losee	0-5	---	---	5-18	1.40-1.45	2-6	0.04-0.10	0.0-2.9	1.0-2.0	.10	.24	5	8	0
	5-24	---	---	20-30	1.35-1.40	0.6-2	0.05-0.11	0.0-2.9	0.5-1.0	.05	.20			
	24-40	---	---	20-30	1.35-1.40	0.6-2	0.07-0.11	0.0-2.9	0.0-0.5	.10	.24			
	40-60	---	---	5-18	1.40-1.45	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.10	.32			
Thornburgh, dry	0-14	---	---	10-18	1.40-1.50	2-6	0.04-0.08	0.0-2.9	2.0-4.0	.05	.20	5	8	0
	14-60	---	---	10-18	1.30-1.40	2-6	0.06-0.10	0.0-2.9	0.5-2.0	.10	.28			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
125:														
Massadona	0-3	---	---	35-40	1.10-1.20	0.0015-0.06	0.17-0.21	3.0-5.9	0.0-0.5	.37	.37	5	4L	86
	3-50	---	---	35-50	1.20-1.30	0.0015-0.06	0.13-0.17	6.0-8.9	0.0-0.5	.37	.37			
	50-60	---	---	35-50	1.20-1.30	0.0015-0.06	0.13-0.17	6.0-8.9	0.0-0.5	.37	.37			
126:														
Massadona	0-5	---	---	20-27	1.25-1.35	0.6-2	0.14-0.17	0.0-2.9	0.0-0.5	.43	.43	5	4L	86
	5-35	---	---	35-50	1.20-1.30	0.0015-0.06	0.13-0.17	6.0-8.9	0.0-0.5	.37	.37			
	35-60	---	---	35-50	1.20-1.30	0.0015-0.06	0.13-0.17	6.0-8.9	0.0-0.5	.37	.37			
Youngston, moist	0-2	---	---	15-25	1.25-1.35	0.6-2	0.16-0.18	0.0-2.9	0.5-1.0	.37	.37	5	4L	86
	2-60	---	---	18-35	1.25-1.35	0.2-0.6	0.19-0.21	3.0-5.9	0.5-1.0	.32	.32			
127:														
Maudlin	0-12	---	---	8-18	1.35-1.50	2-6	0.13-0.15	0.0-2.9	2.0-3.0	.24	.24	2	3	86
	12-21	---	---	18-27	1.25-1.35	0.6-2	0.14-0.18	0.0-2.9	0.5-1.0	.24	.24			
	21-30	---	---	16-24	1.25-1.30	0.6-2	0.10-0.16	0.0-2.9	0.0-0.5	.24	.24			
	30-34	---	---	---	---	0.06-0.2	---	---	---	---	---			
Duffymont	0-4	---	---	10-18	1.35-1.45	2-6	0.03-0.07	0.0-2.9	1.0-2.0	.10	.24	1	8	0
	4-11	---	---	10-18	1.35-1.45	2-6	0.03-0.07	0.0-2.9	1.0-2.0	.05	.24			
	11-15	---	---	---	---	0.06-0.2	---	---	---	---	---			
128:														
Maybell	0-3	---	---	4-7	1.40-1.50	6-20	0.08-0.10	0.0-2.9	1.0-2.0	.15	.15	5	1	220
	3-20	---	---	6-11	1.50-1.70	6-20	0.08-0.10	0.0-2.9	0.0-0.5	.28	.28			
	20-60	---	---	3-9	1.50-1.70	6-20	0.05-0.10	0.0-2.9	0.0-0.5	.32	.32			
129:														
Maybell	0-3	---	---	4-7	1.40-1.50	6-20	0.08-0.10	0.0-2.9	1.0-2.0	.15	.15	5	1	220
	3-15	---	---	6-11	1.50-1.70	6-20	0.08-0.10	0.0-2.9	0.0-0.5	.28	.28			
	15-60	---	---	3-9	1.50-1.70	6-20	0.05-0.10	0.0-2.9	0.0-0.5	.32	.32			
130:														
Maysprings	0-7	---	---	10-15	1.35-1.40	2-6	0.09-0.11	0.0-2.9	1.0-2.0	.20	.20	3	3	86
	7-22	---	---	18-27	1.25-1.30	0.6-2	0.12-0.16	0.0-2.9	0.5-1.0	.24	.24			
	22-34	---	---	10-18	1.40-1.45	2-6	0.09-0.11	0.0-2.9	0.0-0.5	.28	.28			
	34-60	---	---	0-10	1.45-1.50	6-20	0.03-0.07	0.0-2.9	0.0-0.5	.10	.10			
131:														
Maysprings	0-7	---	---	5-10	1.40-1.45	2-6	0.05-0.07	0.0-2.9	1.0-2.0	.10	.10	3	2	134
	7-22	---	---	18-27	1.25-1.30	0.6-2	0.12-0.16	0.0-2.9	0.5-1.0	.24	.24			
	22-34	---	---	10-18	1.40-1.45	2-6	0.09-0.11	0.0-2.9	0.0-0.5	.28	.28			
	34-60	---	---	0-10	1.45-1.50	6-20	0.03-0.07	0.0-2.9	0.0-0.5	.10	.10			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
131:														
Gretdivid----------	0-3	---	---	5-10	1.40-1.50	6-20	0.05-0.07	0.0-2.9	0.5-1.0	.15	.15	5	2	134
	3-7	---	---	14-25	1.30-1.40	0.6-2	0.14-0.16	0.0-2.9	0.5-1.0	.20	.20			
	7-60	---	---	4-8	1.45-1.55	6-20	0.04-0.06	0.0-2.9	0.0-0.5	.05	.10			
132:														
Milren----------	0-6	---	---	12-20	1.25-1.35	0.6-2	0.13-0.15	0.0-2.9	1.0-2.0	.24	.24	3	3	86
	6-20	---	---	35-50	1.20-1.30	0.06-0.2	0.17-0.21	6.0-8.9	0.5-1.0	.24	.24			
	20-60	---	---	35-50	1.20-1.30	0.06-0.2	0.15-0.18	6.0-8.9	0.0-0.5	.24	.24			
133:														
Miracle----------	0-8	---	---	10-20	1.40-1.50	2-6	0.12-0.15	0.0-2.9	2.0-4.0	.20	.20	2	3	86
	8-37	---	---	18-35	1.25-1.40	0.6-2	0.14-0.16	0.0-2.9	0.5-2.0	.28	.28			
	37-41	---	---	---	---	0.06-0.2	---	---	---	---	---			
Coldspring----------	0-14	---	---	15-20	1.10-1.20	0.6-2	0.15-0.18	0.0-2.9	3.0-4.0	.20	.20	3	5	56
	14-34	---	---	25-30	1.20-1.30	0.6-2	0.15-0.18	0.0-2.9	0.5-1.0	.28	.28			
	34-47	---	---	15-25	1.20-1.30	0.6-2	0.12-0.16	0.0-2.9	0.0-0.5	.15	.24			
	47-51	---	---	---	---	0.06-0.2	---	---	---	---	---			
134:														
Morapos----------	0-10	---	---	18-27	1.20-1.40	0.6-2	0.16-0.18	0.0-2.9	2.0-4.0	.24	.24	5	6	48
	10-28	---	---	35-45	1.30-1.40	0.06-0.2	0.14-0.16	6.0-8.9	0.5-1.0	.20	.20			
	28-60	---	---	27-50	1.30-1.40	0.06-0.2	0.13-0.16	6.0-8.9	0.5-1.0	.20	.20			
135:														
Morapos----------	0-10	---	---	18-27	1.20-1.40	0.6-2	0.16-0.18	0.0-2.9	2.0-4.0	.24	.24	5	6	48
	10-28	---	---	35-45	1.30-1.40	0.06-0.2	0.14-0.16	6.0-8.9	0.5-1.0	.20	.20			
	28-60	---	---	27-50	1.30-1.40	0.06-0.2	0.13-0.16	6.0-8.9	0.5-1.0	.20	.20			
136:														
Morapos----------	0-9	---	---	27-32	1.20-1.40	0.2-0.6	0.15-0.17	3.0-5.9	2.0-4.0	.17	.17	5	6	48
	9-23	---	---	35-45	1.30-1.40	0.06-0.2	0.14-0.16	6.0-8.9	0.5-1.0	.20	.20			
	23-60	---	---	27-50	1.30-1.40	0.06-0.2	0.13-0.16	6.0-8.9	0.5-1.0	.20	.20			
Pagoda----------	0-9	---	---	20-27	1.25-1.40	0.6-2	0.16-0.18	0.0-2.9	2.0-3.0	.24	.24	5	6	48
	9-17	---	---	27-35	1.25-1.40	0.2-0.6	0.17-0.21	0.0-2.9	1.0-3.0	.20	.20			
	17-31	---	---	35-50	1.15-1.40	0.06-0.2	0.14-0.21	6.0-8.9	0.5-1.0	.32	.20			
	31-60	---	---	30-50	1.15-1.40	0.06-0.6	0.14-0.21	3.0-5.9	0.0-0.5	.20	.20			
137:														
Morset----------	0-7	---	---	12-18	1.25-1.35	2-6	0.11-0.18	0.0-2.9	2.0-3.0	.24	.24	3	3	86
	7-20	---	---	25-35	1.15-1.25	0.6-2	0.14-0.21	0.0-2.9	1.0-2.0	.28	.28			
	20-60	---	---	12-25	1.20-1.30	2-6	0.11-0.18	0.0-2.9	0.5-1.0	.28	.28			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
137:														
Youga	0-12	---	---	10-20	1.20-1.30	2-6	0.13-0.15	0.0-2.9	3.0-4.0	.15	.15	5	3	86
	12-24	---	---	20-27	1.25-1.35	0.6-2	0.14-0.17	0.0-2.9	0.5-1.0	.20	.20			
	24-40	---	---	18-25	1.30-1.40	2-6	0.13-0.16	0.0-2.9	0.0-0.5	.24	.24			
	40-60	---	---	15-20	1.30-1.40	2-6	0.13-0.15	0.0-2.9	0.0-0.5	.32	.32			
138:														
Moyerson	0-1	---	---	35-40	1.10-1.20	0.06-0.2	0.16-0.18	3.0-5.9	0.5-1.0	.32	.32	2	4L	86
	1-17	---	---	40-50	1.15-1.25	0.06-0.2	0.11-0.14	6.0-8.9	0.5-1.0	.24	.24			
	17-21	---	---	---	---	0.06-0.2	---	---	---	---	---			
Rentsac	0-2	---	---	10-18	1.30-1.45	2-6	0.07-0.10	0.0-2.9	0.5-1.0	.15	.28	1	3	86
	2-10	---	---	10-18	1.35-1.50	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.10	.28			
	10-14	---	---	---	---	0.06-0.6	---	---	---	---	---			
139:														
Muggins	0-1	---	---	0-5	---	---	---	---	---	---	---	5	3	86
	1-19	---	---	12-20	1.40-1.50	2-6	0.08-0.10	0.0-2.9	2.0-3.0	.15	.24			
	19-23	---	---	35-45	1.20-1.30	0.06-0.2	0.16-0.20	6.0-8.9	0.5-1.0	.24	.24			
	23-51	---	---	40-50	1.20-1.30	0.06-0.2	0.14-0.16	6.0-8.9	0.5-1.0	.17	.17			
	51-60	---	---	25-35	1.25-1.35	0.2-0.6	0.17-0.20	3.0-5.9	0.5-1.0	.24	.24			
140:														
Ninot	0-3	---	---	15-25	1.30-1.40	0.6-2	0.09-0.11	0.0-2.9	1.0-2.0	.10	.28	2	8	0
	3-7	---	---	20-30	1.25-1.40	0.6-2	0.10-0.14	0.0-2.9	1.0-2.0	.15	.24			
	7-32	---	---	20-30	1.25-1.40	0.6-2	0.10-0.14	0.0-2.9	0.5-1.0	.15	.24			
	32-60	---	---	20-30	1.40-1.50	0.6-2	0.10-0.14	0.0-2.9	0.5-1.0	.15	.24			
Crago	0-4	---	---	20-27	1.20-1.25	0.6-2	0.07-0.11	0.0-2.9	1.0-2.0	.10	.28	2	8	0
	4-33	---	---	20-30	1.25-1.35	0.6-2	0.05-0.09	0.0-2.9	0.0-0.5	.10	.28			
	33-60	---	---	18-27	1.30-1.40	0.6-2	0.05-0.09	0.0-2.9	0.0-0.5	.05	.28			
Garlips	0-8	---	---	15-25	1.15-1.25	0.6-2	0.14-0.18	0.0-2.9	2.0-4.0	.24	.24	5	5	56
	8-21	---	---	20-32	1.25-1.35	0.2-0.6	0.14-0.21	3.0-5.9	1.0-2.0	.24	.24			
	21-60	---	---	18-32	1.25-1.35	0.2-0.6	0.12-0.16	3.0-5.9	0.5-1.0	.15	.24			
141:														
Nortez, cool	0-5	---	---	15-27	1.25-1.40	0.6-2	0.14-0.18	0.0-2.9	1.0-3.0	.28	.28	2	6	48
	5-10	---	---	27-40	1.25-1.40	0.2-0.6	0.17-0.21	3.0-5.9	1.0-2.0	.20	.20			
	10-26	---	---	35-60	1.15-1.40	0.06-0.2	0.14-0.21	6.0-8.9	0.5-1.0	.24	.24			
	26-30	---	---	35-60	1.15-1.40	0.06-0.2	0.10-0.16	6.0-8.9	0.0-0.5	.15	.28			
	30-34	---	---	---	---	0.06-0.2	---	---	---	---	---			
Morapos	0-10	---	---	18-27	1.20-1.40	0.6-2	0.16-0.18	0.0-2.9	2.0-4.0	.24	.24	5	6	48
	10-28	---	---	35-45	1.30-1.40	0.06-0.2	0.14-0.16	6.0-8.9	0.5-1.0	.20	.20			
	28-60	---	---	27-50	1.30-1.40	0.06-0.2	0.13-0.16	6.0-8.9	0.5-1.0	.20	.20			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
142:														
Nortez, cool--------	0-5	---	---	15-27	1.25-1.40	0.6-2	0.14-0.18	0.0-2.9	1.0-3.0	.28	.28	2	6	48
	5-10	---	---	27-40	1.25-1.40	0.2-0.6	0.17-0.21	3.0-5.9	1.0-2.0	.20	.20			
	10-26	---	---	35-60	1.15-1.40	0.06-0.2	0.14-0.21	6.0-8.9	0.5-1.0	.24	.24			
	26-30	---	---	35-60	1.15-1.40	0.06-0.2	0.10-0.16	6.0-8.9	0.0-0.5	.15	.28			
	30-34	---	---	---	---	0.06-0.2	---	---	---	---	---			
Morapos----------	0-10	---	---	18-27	1.20-1.40	0.6-2	0.16-0.18	0.0-2.9	2.0-4.0	.24	.24	5	6	48
	10-28	---	---	35-45	1.30-1.40	0.06-0.2	0.14-0.16	6.0-8.9	0.5-1.0	.20	.20			
	28-60	---	---	27-50	1.30-1.40	0.06-0.2	0.13-0.16	6.0-8.9	0.5-1.0	.20	.20			
143:														
Nunemaker----------	0-1	---	---	35-40	1.20-1.30	0.2-0.6	0.17-0.21	3.0-5.9	1.0-2.0	.20	.20	5	4	86
	1-26	---	---	45-55	1.20-1.30	0.0015-0.06	0.14-0.16	6.0-8.9	0.5-1.0	.17	.17			
	26-40	---	---	45-55	1.20-1.30	0.0015-0.06	0.13-0.15	6.0-8.9	0.5-1.0	.17	.17			
	40-45	---	---	35-50	1.25-1.35	0.0015-0.2	0.12-0.15	6.0-8.9	0.5-1.0	.24	.24			
	45-60	---	---	20-35	1.30-1.40	0.6-2	0.10-0.15	0.0-2.9	0.5-1.0	.10	.20			
144:														
Pagoda----------	0-9	---	---	20-27	1.25-1.40	0.6-2	0.16-0.18	0.0-2.9	2.0-3.0	.24	.24	5	6	48
	9-17	---	---	27-35	1.25-1.40	0.2-0.6	0.17-0.21	0.0-2.9	1.0-3.0	.20	.20			
	17-25	---	---	35-50	1.15-1.40	0.06-0.2	0.14-0.21	6.0-8.9	0.5-1.0	.32	.20			
	25-60	---	---	30-50	1.15-1.40	0.06-0.6	0.14-0.21	3.0-5.9	0.0-0.5	.20	.20			
145:														
Pagoda----------	0-9	---	---	27-35	1.25-1.40	0.2-0.6	0.17-0.21	0.0-2.9	2.0-3.0	.20	.20	5	6	48
	9-17	---	---	27-35	1.25-1.40	0.2-0.6	0.17-0.21	0.0-2.9	1.0-3.0	.20	.20			
	17-25	---	---	35-50	1.15-1.40	0.06-0.2	0.14-0.21	6.0-8.9	0.5-1.0	.32	.20			
	25-60	---	---	30-50	1.15-1.40	0.06-0.6	0.14-0.21	3.0-5.9	0.0-0.5	.20	.20			
146:														
Pavillion----------	0-3	---	---	20-25	1.25-1.35	0.6-2	0.16-0.18	0.0-2.9	0.5-1.0	.37	.37	3	4L	86
	3-36	---	---	20-35	1.25-1.30	0.2-0.6	0.19-0.21	3.0-5.9	0.0-0.5	.43	.43			
	36-40	---	---	---	---	0.06-0.2	---	---	---	---	---			
Degater----------	0-3	---	---	40-50	1.15-1.30	0.06-0.2	0.04-0.09	3.0-5.9	0.5-1.0	.10	.24	3	8	0
	3-22	---	---	40-50	1.15-1.25	0.0015-0.06	0.13-0.16	6.0-8.9	0.0-0.5	.24	.24			
	22-30	---	---	35-50	1.15-1.25	0.0015-0.06	0.10-0.15	6.0-8.9	0.0-0.5	.28	.28			
	30-34	---	---	---	---	0.06-0.2	---	---	---	---	---			
147:														
Peeler----------	0-1	---	---	0-5	---	---	---	---	---	---	---	5	3	86
	1-18	---	---	10-18	1.25-1.35	2-6	0.12-0.15	0.0-2.9	0.5-1.0	.15	.28			
	18-45	---	---	22-35	1.30-1.40	0.6-2	0.12-0.16	3.0-5.9	0.0-0.5	.15	.24			
	45-60	---	---	15-30	1.35-1.45	0.6-2	0.08-0.13	0.0-2.9	0.0-0.5	.15	.24			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
148:														
Pilotpeak	0-2	---	---	10-18	1.25-1.35	2-6	0.07-0.10	0.0-2.9	0.5-1.0	.15	.28	1	3	86
	2-6	---	---	10-18	1.40-1.50	2-6	0.05-0.08	0.0-2.9	0.0-0.5	.10	.32			
	6-17	---	---	8-18	1.35-1.40	2-6	0.03-0.06	0.0-2.9	0.0-0.5	.10	.32			
	17-21	---	---	---	---	0.0000-0.0000	---	---	---	---	---			
Grubrob	0-3	---	---	5-15	1.25-1.35	2-6	0.13-0.15	0.0-2.9	1.0-2.0	.24	.24	2	3	86
	3-18	---	---	20-25	1.35-1.45	0.6-2	0.14-0.18	0.0-2.9	0.5-1.0	.20	.20			
	18-28	---	---	10-20	1.30-1.40	2-6	0.05-0.09	0.0-2.9	0.0-0.5	.10	.32			
	28-32	---	---	---	---	0.0000-0.0000	---	---	---	---	---			
149:														
Pinelli	0-6	---	---	16-22	1.20-1.30	0.6-2	0.16-0.18	0.0-2.9	0.5-2.0	.37	.37	5	5	56
	6-18	---	---	35-45	1.30-1.40	0.06-0.2	0.14-0.16	3.0-5.9	0.5-1.0	.24	.24			
	18-60	---	---	30-40	1.35-1.40	0.2-0.6	0.14-0.18	3.0-5.9	0.0-0.5	.28	.28			
150:														
Pinelli	0-4	---	---	27-35	1.15-1.25	0.2-0.6	0.17-0.21	3.0-5.9	0.5-2.0	.24	.24	5	6	48
	4-21	---	---	35-45	1.30-1.40	0.06-0.2	0.14-0.16	3.0-5.9	0.5-1.0	.24	.24			
	21-60	---	---	25-35	1.35-1.40	0.2-0.6	0.14-0.18	3.0-5.9	0.0-0.5	.28	.28			
151:														
Pinelli, dry	0-7	---	---	16-22	1.20-1.30	0.6-2	0.16-0.18	0.0-2.9	0.5-2.0	.37	.37	5	5	56
	7-20	---	---	35-45	1.30-1.40	0.06-0.2	0.14-0.16	3.0-5.9	0.5-1.0	.24	.24			
	20-60	---	---	30-40	1.35-1.40	0.2-0.6	0.14-0.18	3.0-5.9	0.0-0.5	.28	.28			
152:														
Pinridge	0-5	---	---	18-27	1.15-1.20	0.6-2	0.14-0.18	0.0-2.9	1.0-2.0	.28	.28	5	6	48
	5-20	---	---	20-30	1.20-1.30	0.6-2	0.14-0.18	0.0-2.9	1.0-2.0	.32	.32			
	20-41	---	---	20-30	1.25-1.30	0.6-2	0.14-0.18	0.0-2.9	1.0-2.0	.32	.32			
	41-60	---	---	15-27	1.20-1.30	0.6-2	0.14-0.18	0.0-2.9	0.0-0.5	.24	.24			
153:														
Pricecreek	0-4	---	---	27-35	1.10-1.15	0.2-0.6	0.17-0.19	3.0-5.9	1.0-3.0	.20	.20	3	4L	86
	4-21	---	---	35-50	1.30-1.35	0.0015-0.06	0.12-0.15	6.0-8.9	0.5-1.0	.24	.24			
	21-35	---	---	35-50	1.30-1.35	0.0015-0.06	0.10-0.13	6.0-8.9	0.0-0.5	.28	.28			
	35-60	---	---	35-50	1.30-1.35	0.0015-0.06	0.10-0.13	6.0-8.9	0.0-0.5	.28	.28			
154:														
Quealman	0-3	---	---	2-7	1.35-1.40	2-6	0.06-0.08	0.0-2.9	0.5-1.0	.17	.17	5	1	220
	3-40	---	---	10-15	1.35-1.40	2-6	0.10-0.13	0.0-2.9	0.5-1.0	.24	.24			
	40-60	---	---	5-15	1.35-1.40	2-6	0.08-0.12	0.0-2.9	0.0-0.5	.28	.28			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
155:														
Rencot	0-2	---	---	18-27	1.20-1.30	0.6-2	0.05-0.07	0.0-2.9	1.0-2.0	.05	.28	1	8	0
	2-13	---	---	18-27	1.25-1.35	0.6-2	0.05-0.07	0.0-2.9	0.0-0.5	.05	.43			
	13-17	---	---	---	---	0.06-0.6	---	---	---	---	---			
Duffymont	0-2	---	---	10-18	1.35-1.45	2-6	0.03-0.07	0.0-2.9	1.0-2.0	.05	.24	1	8	0
	2-12	---	---	10-18	1.35-1.45	2-6	0.03-0.07	0.0-2.9	1.0-2.0	.05	.24			
	12-16	---	---	---	---	0.06-0.2	---	---	---	---	---			
156:														
Rentsac	0-3	---	---	10-18	1.30-1.45	2-6	0.07-0.10	0.0-2.9	0.5-1.0	.15	.28	1	3	86
	3-10	---	---	10-18	1.35-1.50	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.10	.28			
	10-14	---	---	---	---	0.06-0.6	---	---	---	---	---			
157:														
Rentsac	0-2	---	---	10-18	1.30-1.45	2-6	0.06-0.08	0.0-2.9	0.5-1.0	.10	.28	1	8	0
	2-10	---	---	10-18	1.35-1.50	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.10	.28			
	10-14	---	---	---	---	0.06-0.6	---	---	---	---	---			
Moyerson	0-1	---	---	35-40	1.10-1.20	0.06-0.2	0.12-0.14	3.0-5.9	0.5-1.0	.20	.32	2	4L	86
	1-17	---	---	40-50	1.15-1.25	0.06-0.2	0.11-0.14	6.0-8.9	0.5-1.0	.24	.24			
	17-21	---	---	---	---	0.06-0.2	---	---	---	---	---			
158:														
Rock outcrop	0-60	---	---	0-0	---	0.0000-0.0000	0.00-0.00	---	---	---	---	-	8	0
Earsman	0-2	---	---	5-12	1.40-1.50	2-6	0.03-0.05	0.0-2.9	1.0-2.0	.02	.17	1	8	0
	2-12	---	---	12-18	1.40-1.50	2-6	0.04-0.07	0.0-2.9	0.5-1.0	.05	.28			
	12-16	---	---	---	---	0.06-0.2	---	---	---	---	---			
159:														
Rock outcrop	0-60	---	---	0-0	---	0.0000-0.0000	0.00-0.00	---	---	---	---	-	8	0
Haploborolls	0-8	---	---	10-20	1.30-1.40	2-6	0.07-0.10	0.0-2.9	2.0-3.0	.15	.24	1	3	86
	8-24	---	---	10-27	1.30-1.45	2-6	0.08-0.16	0.0-2.9	0.5-1.0	.05	.20			
	24-28	---	---	---	---	0.06-0.2	---	---	---	---	---			
160:														
Rock outcrop	0-60	---	---	0-0	---	0.0000-0.0000	0.00-0.00	---	---	---	---	-	8	0
Torriorthents	0-2	---	---	10-20	1.35-1.45	2-6	0.07-0.10	0.0-2.9	0.5-1.0	.15	.28	1	3	86
	2-14	---	---	15-35	1.25-1.35	0.6-6	0.08-0.14	0.0-2.9	0.5-1.0	.10	.28			
	14-18	---	---	---	---	0.06-0.2	---	---	---	---	---			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
161:														
Rock River----------	0-3	---	---	10-20	1.30-1.40	2-6	0.12-0.14	0.0-2.9	1.0-2.0	.24	.24	5	3	86
	3-22	---	---	20-30	1.30-1.40	0.6-2	0.14-0.18	0.0-2.9	0.5-1.0	.20	.20			
	22-32	---	---	15-25	1.35-1.45	0.6-2	0.12-0.16	0.0-2.9	0.5-1.0	.24	.24			
	32-60	---	---	10-18	1.50-1.60	2-6	0.08-0.12	0.0-2.9	0.5-1.0	.20	.20			
162:														
Rock River----------	0-3	---	---	10-20	1.30-1.40	2-6	0.12-0.14	0.0-2.9	1.0-2.0	.24	.24	5	3	86
	3-22	---	---	20-30	1.30-1.40	0.6-2	0.14-0.18	0.0-2.9	0.5-1.0	.20	.20			
	22-32	---	---	15-25	1.35-1.45	0.6-2	0.12-0.16	0.0-2.9	0.5-1.0	.24	.24			
	32-60	---	---	10-18	1.50-1.60	2-6	0.08-0.12	0.0-2.9	0.5-1.0	.20	.20			
163:														
Rock River----------	0-3	---	---	10-20	1.30-1.40	2-6	0.12-0.14	0.0-2.9	1.0-2.0	.24	.24	5	3	86
	3-22	---	---	20-30	1.30-1.40	0.6-2	0.14-0.18	0.0-2.9	0.5-1.0	.20	.20			
	22-32	---	---	15-25	1.35-1.45	0.6-2	0.12-0.16	0.0-2.9	0.5-1.0	.24	.24			
	32-60	---	---	10-18	1.50-1.60	2-6	0.08-0.12	0.0-2.9	0.5-1.0	.20	.20			
164:														
Rock River----------	0-2	---	---	7-12	1.40-1.50	2-6	0.07-0.08	0.0-2.9	1.0-2.0	.17	.17	5	2	134
	2-21	---	---	20-30	1.30-1.40	0.6-2	0.14-0.18	0.0-2.9	0.5-1.0	.20	.20			
	21-48	---	---	15-25	1.35-1.45	0.6-2	0.12-0.16	0.0-2.9	0.5-1.0	.24	.24			
	48-60	---	---	10-18	1.50-1.60	2-6	0.08-0.12	0.0-2.9	0.5-1.0	.20	.20			
Taffom----------	0-8	---	---	10-15	1.30-1.40	2-6	0.09-0.12	0.0-2.9	1.0-2.0	.20	.20	5	3	86
	8-41	---	---	20-30	1.30-1.40	0.6-2	0.14-0.18	0.0-2.9	0.0-0.5	.24	.24			
	41-50	---	---	14-24	1.40-1.50	0.6-2	0.12-0.18	0.0-2.9	0.0-0.5	.24	.24			
	50-60	---	---	5-20	1.30-1.40	2-6	0.03-0.07	0.0-2.9	0.0-0.5	.28	.28			
165:														
Rogrube sandy loam----------	0-3	---	---	15-20	1.25-1.35	2-6	0.12-0.15	0.0-2.9	0.5-1.0	.28	.28	5	3	86
	3-28	---	---	27-35	1.25-1.35	0.2-0.6	0.17-0.21	0.0-2.9	0.0-0.5	.37	.37			
	28-60	---	---	20-35	1.30-1.40	0.2-0.6	0.12-0.17	0.0-2.9	0.0-0.5	.37	.37			
Rogrube clay loam----------	0-3	---	---	27-35	1.15-1.25	0.2-0.6	0.17-0.21	0.0-2.9	0.5-1.0	.24	.24	5	4L	86
	3-28	---	---	27-35	1.25-1.35	0.2-0.6	0.17-0.21	0.0-2.9	0.0-0.5	.37	.37			
	28-60	---	---	20-35	1.30-1.40	0.2-0.6	0.12-0.17	0.0-2.9	0.0-0.5	.37	.37			
166:														
Routt----------	0-2	---	---	0-5	---	---	---	---	---	---	---	4	6	48
	2-27	---	---	18-24	1.20-1.30	0.6-2	0.16-0.18	0.0-2.9	2.0-4.0	.24	.24			
	27-33	---	---	35-40	1.25-1.35	0.06-0.2	0.17-0.21	3.0-5.9	0.5-1.0	.28	.28			
	33-60	---	---	35-45	1.25-1.35	0.06-0.2	0.17-0.21	3.0-5.9	0.0-0.5	.28	.28			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
167:														
Routt	0-24	---	---	18-24	1.20-1.30	0.6-2	0.16-0.18	0.0-2.9	2.0-4.0	.24	.24	4	6	48
	24-35	---	---	35-40	1.25-1.35	0.06-0.2	0.17-0.21	3.0-5.9	0.5-1.0	.28	.28			
	35-60	---	---	35-45	1.25-1.35	0.06-0.2	0.17-0.21	3.0-5.9	0.0-0.5	.28	.28			
Cochetopa	0-5	---	---	20-27	1.10-1.15	0.6-2	0.16-0.18	0.0-2.9	3.0-4.0	.20	.20	5	6	48
	5-21	---	---	20-35	1.10-1.25	0.2-2	0.17-0.20	0.0-2.9	2.0-3.0	.20	.20			
	21-30	---	---	35-55	1.15-1.25	0.06-0.2	0.17-0.20	6.0-8.9	0.5-1.0	.20	.20			
	30-60	---	---	35-55	1.15-1.25	0.06-0.2	0.17-0.20	6.0-8.9	0.0-0.5	.28	.28			
Binco	0-4	---	---	35-40	1.10-1.20	0.06-0.2	0.15-0.18	3.0-5.9	2.0-3.0	.10	.20	5	4	86
	4-35	---	---	35-45	1.20-1.30	0.0015-0.06	0.15-0.19	6.0-8.9	0.5-1.0	.24	.24			
	35-60	---	---	35-50	1.20-1.30	0.0015-0.06	0.14-0.18	6.0-8.9	0.5-1.0	.24	.24			
168:														
Ruedloff	0-4	---	---	10-15	1.40-1.50	2-6	0.10-0.13	0.0-2.9	0.5-1.0	.28	.28	3	3	86
	4-20	---	---	10-18	1.35-1.45	2-6	0.09-0.12	0.0-2.9	0.0-0.5	.28	.28			
	20-60	---	---	3-8	1.55-1.60	6-20	0.03-0.07	0.0-2.9	0.0-0.5	.17	.17			
169:														
Ruedloff	0-2	---	---	5-10	1.40-1.50	6-20	0.06-0.08	0.0-2.9	0.5-1.0	.15	.15	3	2	134
	2-24	---	---	10-18	1.35-1.45	2-6	0.09-0.12	0.0-2.9	0.0-0.5	.28	.28			
	24-60	---	---	3-8	1.55-1.60	6-20	0.03-0.07	0.0-2.9	0.0-0.5	.17	.17			
Dunul	0-3	---	---	3-12	1.40-1.45	6-20	0.03-0.05	0.0-2.9	0.5-1.0	.05	.15	5	8	0
	3-20	---	---	3-12	1.55-1.65	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.05	.17			
	20-31	---	---	0-12	1.55-1.65	20-101	0.03-0.05	0.0-2.9	0.0-0.5	.05	.17			
	31-60	---	---	0-12	1.55-1.65	20-101	0.03-0.05	0.0-2.9	0.0-0.5	.05	.17			
170:														
Ryan Park	0-5	---	---	5-10	1.40-1.50	2-6	0.08-0.10	0.0-2.9	1.0-2.0	.17	.17	5	2	134
	5-23	---	---	10-18	1.35-1.45	2-6	0.10-0.13	0.0-2.9	0.5-1.0	.28	.28			
	23-30	---	---	10-18	1.35-1.45	2-6	0.10-0.13	0.0-2.9	0.5-1.0	.28	.28			
	30-60	---	---	5-10	1.45-1.55	2-6	0.08-0.10	0.0-2.9	0.5-1.0	.20	.20			
171:														
Ryan Park	0-5	---	---	8-12	1.30-1.40	2-6	0.10-0.13	0.0-2.9	1.0-2.0	.24	.24	5	3	86
	5-23	---	---	10-18	1.35-1.45	2-6	0.10-0.13	0.0-2.9	0.5-1.0	.28	.28			
	23-30	---	---	10-18	1.35-1.45	2-6	0.10-0.13	0.0-2.9	0.5-1.0	.28	.28			
	30-39	---	---	5-10	1.45-1.55	2-6	0.08-0.10	0.0-2.9	0.5-1.0	.20	.20			
	39-60	---	---	3-6	1.50-1.60	6-20	0.05-0.08	0.0-2.9	0.5-1.0	.17	.17			
172:														
Ryan Park	0-5	---	---	5-10	1.40-1.50	2-6	0.08-0.10	0.0-2.9	1.0-2.0	.17	.17	5	2	134
	5-30	---	---	10-18	1.35-1.45	2-6	0.10-0.13	0.0-2.9	0.5-1.0	.28	.28			
	30-60	---	---	5-10	1.45-1.55	2-6	0.08-0.10	0.0-2.9	0.5-1.0	.20	.20			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
172:														
Coyet	0-6	---	---	5-12	1.45-1.55	2-6	0.08-0.11	0.0-2.9	0.5-1.0	.20	.20	5	2	134
	6-22	---	---	5-12	1.45-1.55	2-6	0.08-0.11	0.0-2.9	0.0-0.5	.24	.24			
	22-60	---	---	5-10	1.45-1.55	2-6	0.05-0.11	0.0-2.9	0.0-0.5	.24	.24			
173:														
Ryark	0-6	---	---	5-10	1.35-1.45	2-6	0.08-0.10	0.0-2.9	1.0-2.0	.17	.17	5	2	134
	6-19	---	---	10-18	1.35-1.45	2-6	0.10-0.13	0.0-2.9	0.5-1.0	.24	.24			
	19-30	---	---	5-12	1.40-1.50	2-6	0.06-0.08	0.0-2.9	0.5-1.0	.20	.20			
	30-60	---	---	3-7	1.45-1.55	6-20	0.03-0.07	0.0-2.9	0.5-1.0	.15	.15			
Powderwash	0-3	---	---	6-10	1.30-1.40	6-20	0.06-0.08	0.0-2.9	0.5-1.0	.20	.20	3	2	134
	3-15	---	---	15-20	1.40-1.50	2-6	0.12-0.15	0.0-2.9	0.5-1.0	.24	.24			
	15-22	---	---	10-14	1.50-1.60	2-6	0.09-0.12	0.0-2.9	0.0-0.5	.28	.28			
	22-38	---	---	35-50	1.40-1.50	0.0015-0.06	0.15-0.19	6.0-8.9	0.0-0.5	.28	.28			
	38-42	---	---	---	---	0.06-2	---	---	---	---	---			
174:														
Ryark	0-6	---	---	5-10	1.35-1.45	2-6	0.08-0.10	0.0-2.9	1.0-2.0	.17	.17	5	2	134
	6-19	---	---	10-18	1.35-1.45	2-6	0.10-0.13	0.0-2.9	0.5-1.0	.24	.24			
	19-30	---	---	5-12	1.40-1.50	2-6	0.06-0.08	0.0-2.9	0.5-1.0	.20	.20			
	30-60	---	---	3-7	1.45-1.55	6-20	0.03-0.07	0.0-2.9	0.5-1.0	.15	.15			
Maybell	0-3	---	---	4-7	1.40-1.50	6-20	0.08-0.10	0.0-2.9	1.0-2.0	.15	.15	5	1	220
	3-20	---	---	6-11	1.50-1.70	6-20	0.08-0.10	0.0-2.9	0.0-0.5	.28	.28			
	20-60	---	---	3-9	1.50-1.70	6-20	0.05-0.10	0.0-2.9	0.0-0.5	.32	.32			
175:														
Sandwash	0-2	---	---	18-27	1.30-1.35	0.6-2	0.16-0.18	0.0-2.9	0.0-1.0	.37	.37	2	4L	86
	2-16	---	---	18-30	1.35-1.45	0.6-2	0.13-0.16	0.0-2.9	0.0-0.5	.32	.32			
	16-22	---	---	18-30	1.40-1.50	0.6-2	0.04-0.07	0.0-2.9	0.0-0.5	.05	.37			
	22-26	---	---	---	---	0.06-0.6	---	---	---	---	---			
Langspring	0-3	---	---	10-20	1.35-1.50	0.6-2	0.13-0.15	0.0-2.9	0.5-1.0	.28	.28	2	3	86
	3-42	---	---	18-27	1.20-1.30	0.6-2	0.13-0.16	0.0-2.9	0.0-0.5	.32	.32			
	42-60	---	---	18-30	1.25-1.35	0.6-2	0.13-0.16	0.0-2.9	0.0-0.5	.32	.32			
Baston	0-1	---	---	15-20	1.35-1.45	0.6-2	0.09-0.12	0.0-2.9	0.0-1.0	.28	.28	2	3	86
	1-28	---	---	35-50	1.20-1.30	0.03-0.06	0.10-0.13	6.0-8.9	0.0-1.0	.32	.32			
	28-32	---	---	---	---	0.06-0.2	---	---	---	---	---			
176:														
Schooner	0-4	---	---	3-8	1.45-1.55	6-20	0.06-0.08	0.0-2.9	0.5-1.0	.20	.20	1	2	134
	4-14	---	---	3-10	1.45-1.55	6-20	0.05-0.07	0.0-2.9	0.0-0.5	.32	.32			
	14-18	---	---	---	---	0.06-0.2	---	---	---	---	---			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
176:														
Rock outcrop--------	0-60	---	---	0-0	---	0.0000-0.0000	0.00-0.00	---	---	---	---	-	8	0
177:														
Schooner----------	0-4	---	---	3-8	1.45-1.55	6-20	0.06-0.08	0.0-2.9	0.5-1.0	.20	.20	1	2	134
	4-14	---	---	3-10	1.45-1.55	6-20	0.05-0.07	0.0-2.9	0.0-0.5	.32	.32			
	14-18	---	---	---	---	0.06-0.2	---	---	---	---	---			
Tricera----------	0-4	---	---	8-12	1.25-1.35	2-6	0.06-0.08	0.0-2.9	0.5-1.0	.20	.20	5	2	134
	4-47	---	---	3-12	1.30-1.35	2-6	0.06-0.11	0.0-2.9	0.0-0.5	.24	.24			
	47-60	---	---	3-8	1.35-1.40	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.20	.20			
178:														
Simanni----------	0-10	---	---	10-15	1.30-1.35	2-6	0.09-0.12	0.0-2.9	0.5-1.0	.24	.24	3	3	86
	10-22	---	---	20-25	1.25-1.30	0.6-2	0.13-0.16	0.0-2.9	0.0-0.5	.24	.24			
	22-33	---	---	12-18	1.35-1.40	2-6	0.09-0.12	0.0-2.9	0.0-0.5	.28	.28			
	33-60	---	---	3-10	1.45-1.50	6-20	0.03-0.06	0.0-2.9	0.0-0.5	.15	.15			
Ruedloff----------	0-2	---	---	5-10	1.40-1.50	6-20	0.06-0.08	0.0-2.9	0.5-1.0	.15	.15	3	2	134
	2-24	---	---	10-18	1.35-1.45	2-6	0.09-0.12	0.0-2.9	0.0-0.5	.28	.28			
	24-60	---	---	3-8	1.55-1.60	6-20	0.03-0.07	0.0-2.9	0.0-0.5	.17	.17			
179:														
Skyway, dry---------	0-20	---	---	10-20	1.35-1.50	2-6	0.10-0.14	0.0-2.9	1.0-6.0	.15	.15	2	3	86
	20-31	---	---	10-18	1.25-1.35	2-6	0.13-0.15	0.0-2.9	0.0-0.5	.28	.28			
	31-35	---	---	---	---	0.06-0.2	---	---	---	---	---			
180:														
Spool----------	0-4	---	---	5-12	1.40-1.45	2-6	0.08-0.11	0.0-2.9	0.5-1.0	.28	.28	1	2	134
	4-12	---	---	5-12	1.40-1.45	2-6	0.06-0.11	0.0-2.9	0.0-0.5	.17	.32			
	12-16	---	---	---	---	0.06-0.2	---	---	---	---	---			
Maybell----------	0-3	---	---	5-9	1.45-1.55	6-20	0.08-0.10	0.0-2.9	1.0-2.0	.24	.24	5	2	134
	3-32	---	---	6-11	1.50-1.70	6-20	0.08-0.10	0.0-2.9	0.0-0.5	.28	.28			
	32-60	---	---	3-9	1.50-1.70	6-20	0.05-0.10	0.0-2.9	0.0-0.5	.32	.32			
181:														
Stunner----------	0-4	---	---	10-15	1.35-1.45	2-6	0.10-0.13	0.0-2.9	0.5-1.0	.28	.28	3	3	86
	4-15	---	---	18-27	1.30-1.40	0.6-2	0.12-0.16	0.0-2.9	0.0-0.5	.24	.24			
	15-24	---	---	8-15	1.40-1.50	2-6	0.09-0.12	0.0-2.9	0.0-0.5	.28	.28			
	24-43	---	---	8-15	1.40-1.50	2-6	0.07-0.10	0.0-2.9	0.0-0.5	.24	.24			
	43-60	---	---	5-15	1.50-1.60	2-6	0.05-0.08	0.0-2.9	0.0-0.5	.20	.20			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
182:														
Stunner, moist------	0-5	---	---	20-25	1.25-1.35	0.6-2	0.15-0.18	0.0-2.9	1.0-2.0	.28	.28	2	6	48
	5-17	---	---	25-34	1.30-1.40	0.2-0.6	0.16-0.20	3.0-5.9	0.5-1.0	.37	.37			
	17-42	---	---	20-30	1.30-1.40	0.6-2	0.11-0.14	0.0-2.9	0.0-0.5	.37	.37			
	42-60	---	---	15-20	1.30-1.45	0.6-2	0.08-0.14	0.0-2.9	0.0-0.5	.32	.32			
Emlin---------------	0-11	---	---	20-25	1.25-1.35	0.6-2	0.15-0.18	0.0-2.9	2.0-4.0	.24	.24	2	6	48
	11-19	---	---	25-35	1.30-1.45	0.2-0.6	0.16-0.21	3.0-5.9	0.5-1.0	.32	.32			
	19-60	---	---	25-30	1.30-1.40	0.2-0.6	0.11-0.19	0.0-2.9	0.0-1.0	.37	.37			
183:														
Styers--------------	0-1	---	---	40-45	1.15-1.30	0.06-0.2	0.14-0.16	6.0-8.9	0.0-1.0	.17	.17	3	4	86
	1-35	---	---	50-60	1.15-1.30	0.0015-0.06	0.14-0.16	6.0-8.9	0.0-1.0	.17	.32			
	35-39	---	---	---	---	0.06-0.2	---	---	---	---	---			
Ironsprings---------	0-14	---	---	5-10	1.45-1.55	2-6	0.05-0.07	0.0-2.9	1.0-2.0	.10	.10	5	2	134
	14-40	---	---	10-18	1.35-1.45	2-6	0.09-0.13	0.0-2.9	0.5-1.0	.24	.24			
	40-60	---	---	3-8	1.45-1.55	2-6	0.03-0.08	0.0-2.9	0.0-0.5	.10	.10			
Maysprings----------	0-7	---	---	5-10	1.40-1.45	2-6	0.05-0.07	0.0-2.9	1.0-2.0	.10	.10	3	2	134
	7-22	---	---	18-27	1.25-1.30	0.6-2	0.12-0.16	0.0-2.9	0.5-1.0	.24	.24			
	22-28	---	---	10-18	1.40-1.45	2-6	0.09-0.11	0.0-2.9	0.0-0.5	.28	.28			
	28-60	---	---	0-10	1.45-1.50	6-20	0.03-0.07	0.0-2.9	0.0-0.5	.10	.10			
184:														
Styers--------------	0-1	---	---	35-40	1.15-1.30	0.06-0.2	0.16-0.20	3.0-5.9	0.0-1.0	.32	.32	3	4	86
	1-28	---	---	50-60	1.15-1.30	0.0015-0.06	0.14-0.16	6.0-8.9	0.0-1.0	.17	.32			
	28-32	---	---	---	---	0.06-0.2	---	---	---	---	---			
Pinelli-------------	0-8	---	---	15-20	1.20-1.30	2-6	0.13-0.16	0.0-2.9	0.5-2.0	.28	.28	5	3	86
	8-26	---	---	35-45	1.30-1.40	0.06-0.2	0.14-0.16	3.0-5.9	0.5-1.0	.24	.24			
	26-60	---	---	30-40	1.35-1.40	0.2-0.6	0.14-0.18	3.0-5.9	0.0-0.5	.28	.28			
Taffom--------------	0-6	---	---	10-15	1.30-1.40	2-6	0.09-0.12	0.0-2.9	1.0-2.0	.20	.20	5	3	86
	6-43	---	---	20-30	1.30-1.40	0.6-2	0.14-0.18	0.0-2.9	0.0-0.5	.24	.24			
	43-53	---	---	14-24	1.40-1.50	0.6-2	0.12-0.18	0.0-2.9	0.0-0.5	.24	.24			
	53-60	---	---	5-20	1.30-1.40	2-6	0.03-0.07	0.0-2.9	0.0-0.5	.28	.28			
185:														
Taffom--------------	0-6	---	---	10-15	1.30-1.40	2-6	0.09-0.12	0.0-2.9	1.0-2.0	.20	.20	5	3	86
	6-43	---	---	20-30	1.30-1.40	0.6-2	0.14-0.18	0.0-2.9	0.0-0.5	.24	.24			
	43-53	---	---	14-24	1.40-1.50	0.6-2	0.12-0.18	0.0-2.9	0.0-0.5	.24	.24			
	53-60	---	---	5-20	1.30-1.40	2-6	0.03-0.07	0.0-2.9	0.0-0.5	.28	.28			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
186:														
Talamantes----------	0-3	---	---	18-27	1.25-1.35	0.6-2	0.14-0.18	0.0-2.9	0.0-1.0	.37	.37	5	4L	86
	3-48	---	---	18-35	1.20-1.25	0.2-2	0.16-0.19	0.0-2.9	0.0-1.0	.37	.37			
	48-60	---	---	18-27	1.25-1.35	0.6-2	0.13-0.17	0.0-2.9	0.0-1.0	.32	.32			
187:														
Talamantes----------	0-3	---	---	18-27	1.25-1.35	0.6-2	0.14-0.18	0.0-2.9	0.0-1.0	.37	.37	5	4L	86
	3-48	---	---	18-35	1.20-1.25	0.2-2	0.16-0.19	0.0-2.9	0.0-1.0	.37	.37			
	48-60	---	---	15-27	1.25-1.35	0.6-2	0.13-0.17	0.0-2.9	0.0-1.0	.32	.32			
188:														
Talamantes, saline----------	0-3	---	---	20-27	1.25-1.40	0.6-2	0.13-0.16	0.0-2.9	0.0-1.0	.37	.37	5	4L	86
	3-24	---	---	28-34	1.25-1.35	0.2-0.6	0.12-0.16	3.0-5.9	0.0-1.0	.24	.24			
	24-60	---	---	20-28	1.25-1.35	0.6-2	0.13-0.14	0.0-2.9	0.0-1.0	.37	.37			
189:														
Tipper----------	0-1	---	---	5-12	1.45-1.55	6-20	0.06-0.08	0.0-2.9	0.5-1.0	.28	.28	3	2	134
	1-28	---	---	5-12	1.45-1.55	6-20	0.06-0.08	0.0-2.9	0.0-0.5	.28	.28			
	28-32	---	---	---	---	0.2-0.6	---	---	---	---	---			
Crustown----------	0-1	---	---	5-12	1.45-1.60	6-20	0.06-0.10	0.0-2.9	0.0-0.5	.32	.32	2	2	134
	1-10	---	---	3-12	1.45-1.60	6-20	0.06-0.10	0.0-2.9	0.0-0.5	.32	.32			
	10-14	---	---	---	---	0.2-0.6	---	---	---	---	---			
190:														
Tipperary----------	0-3	---	---	0-5	1.45-1.60	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.20	.20	5	1	220
	3-60	---	---	0-10	1.45-1.55	6-20	0.06-0.09	0.0-2.9	0.0-0.5	.24	.24			
191:														
Tipperary----------	0-3	---	---	5-12	1.45-1.55	6-20	0.08-0.11	0.0-2.9	0.0-0.5	.32	.32	5	2	134
	3-60	---	---	0-10	1.45-1.55	6-20	0.06-0.09	0.0-2.9	0.0-0.5	.24	.24			
192:														
Tipperary----------	0-3	---	---	5-12	1.45-1.55	6-20	0.08-0.11	0.0-2.9	0.0-0.5	.32	.32	5	2	134
	3-60	---	---	0-10	1.45-1.55	6-20	0.06-0.09	0.0-2.9	0.0-0.5	.24	.24			
Willwood----------	0-16	---	---	8-14	1.45-1.55	6-20	0.06-0.08	0.0-2.9	0.5-1.0	.28	.28	3	2	134
	16-60	---	---	8-14	1.45-1.50	6-20	0.02-0.06	0.0-2.9	0.0-0.5	.05	.32			
193:														
Tisworth----------	0-3	---	---	12-18	1.30-1.35	2-6	0.13-0.15	0.0-2.9	1.0-2.0	.24	.24	2	3	86
	3-18	---	---	25-34	1.25-1.30	0.06-0.2	0.08-0.12	0.0-2.9	0.5-1.0	.37	.37			
	18-60	---	---	10-30	1.25-1.35	0.6-2	0.06-0.10	0.0-2.9	0.0-0.5	.37	.37			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
194:														
Tolman	0-6	---	---	12-18	1.25-1.30	2-6	0.06-0.08	0.0-2.9	1.0-2.0	.10	.24	1	8	0
	6-15	---	---	20-27	1.30-1.35	0.6-2	0.06-0.08	0.0-2.9	1.0-2.0	.05	.17			
	15-19	---	---	---	---	0.06-0.2	---	---	---	---	---			
Duffymont	0-4	---	---	10-18	1.35-1.45	2-6	0.03-0.07	0.0-2.9	1.0-2.0	.10	.24	1	8	0
	4-11	---	---	10-18	1.35-1.45	2-6	0.03-0.07	0.0-2.9	1.0-2.0	.05	.24			
	11-15	---	---	---	---	0.06-0.2	---	---	---	---	---			
195:														
Torriorthents	0-8	---	---	10-27	1.40-1.60	0.6-6	0.10-0.14	0.0-2.9	0.5-1.0	.20	.37	2	4L	86
	8-12	---	---	---	---	0.06-2	---	---	---	---	---			
196:														
Torriorthents	0-8	---	---	10-27	1.40-1.60	0.6-6	0.10-0.14	0.0-2.9	0.5-1.0	.20	.37	2	4L	86
	8-12	---	---	---	---	0.06-2	---	---	---	---	---			
Baston	0-1	---	---	15-20	1.35-1.45	0.6-2	0.09-0.12	0.0-2.9	0.0-1.0	.28	.28	2	3	86
	1-28	---	---	35-50	1.20-1.30	0.0015-0.06	0.10-0.13	6.0-8.9	0.0-1.0	.32	.32			
	28-32	---	---	---	---	0.06-0.2	---	---	---	---	---			
197:														
Torriorthents	0-2	---	---	10-20	1.35-1.45	2-6	0.07-0.10	0.0-2.9	0.5-1.0	.15	.28	1	3	86
	2-14	---	---	15-35	1.25-1.35	0.6-6	0.08-0.14	0.0-2.9	0.5-1.0	.10	.28			
	14-18	---	---	---	---	0.06-0.2	---	---	---	---	---			
Rock outcrop, sandstone	0-60	---	---	0-0	---	0.0000-0.0000	0.00-0.00	---	---	---	---	-	8	0
198:														
Torriorthents	0-8	---	---	27-40	1.30-1.50	0.06-0.6	0.07-0.12	3.0-5.9	0.5-1.0	.32	.32	2	4L	86
	8-12	---	---	---	---	0.06-2	---	---	---	---	---			
Rock outcrop, shale	0-60	---	---	0-0	---	0.0000-0.0000	0.00-0.00	---	---	---	---	-	8	0
199:														
Torriorthents	0-2	---	---	27-40	1.25-1.40	0.2-2	0.17-0.20	3.0-5.9	0.5-1.0	.24	.24	3	4L	86
	2-15	---	---	15-45	1.15-1.35	0.2-2	0.10-0.16	3.0-5.9	0.0-0.5	.32	.32			
	15-19	---	---	---	---	0.06-2	---	---	---	---	---			
Torripsamments	0-4	---	---	2-7	1.45-1.60	6-20	0.05-0.08	0.0-2.9	0.5-1.0	.17	.17	2	1	310
	4-26	---	---	2-12	1.45-1.55	6-20	0.04-0.06	0.0-2.9	0.5-1.0	.17	.17			
	26-30	---	---	---	---	0.06-0.2	---	---	---	---	---			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
200:														
Tresano	0-8	---	---	14-20	1.35-1.40	2-6	0.10-0.13	0.0-2.9	0.5-1.0	.28	.28	5	3	86
	8-30	---	---	20-30	1.25-1.35	0.6-2	0.15-0.19	0.0-2.9	0.0-0.5	.32	.32			
	30-60	---	---	16-22	1.30-1.40	0.6-2	0.11-0.16	0.0-2.9	0.0-0.5	.28	.28			
201:														
Tresano	0-2	---	---	18-24	1.25-1.40	0.6-2	0.14-0.18	0.0-2.9	0.5-1.0	.37	.37	5	6	48
	2-28	---	---	20-30	1.25-1.35	0.6-2	0.15-0.19	0.0-2.9	0.0-0.5	.32	.32			
	28-60	---	---	16-22	1.30-1.40	0.6-2	0.11-0.16	0.0-2.9	0.0-0.5	.28	.28			
Hiatha	0-2	---	---	40-50	1.15-1.25	0.2-0.6	0.16-0.18	6.0-8.9	0.0-0.5	.28	.28	2	4	86
	2-14	---	---	40-50	1.20-1.30	0.0015-0.06	0.14-0.16	6.0-8.9	0.0-0.5	.28	.28			
	14-18	---	---	---	---	0.06-0.2	---	---	---	---	---			
Kandaly	0-3	---	---	0-10	1.45-1.55	6-20	0.06-0.08	0.0-2.9	0.0-0.5	.24	.24	5	2	134
	3-60	---	---	0-7	1.45-1.60	6-20	0.05-0.07	0.0-2.9	0.0-0.5	.28	.28			
202:														
Turzo	0-4	---	---	20-27	1.15-1.25	0.6-2	0.14-0.18	0.0-2.9	0.5-1.0	.37	.37	5	4L	86
	4-23	---	---	20-34	1.20-1.30	0.6-2	0.14-0.18	0.0-2.9	0.0-0.5	.43	.43			
	23-60	---	---	20-34	1.20-1.30	0.6-2	0.13-0.17	0.0-2.9	0.0-0.5	.43	.43			
203:														
Turzo, saline	0-3	---	---	20-27	1.15-1.25	0.6-2	0.14-0.17	0.0-2.9	0.5-1.0	.37	.37	5	4L	86
	3-18	---	---	20-30	1.20-1.30	0.6-2	0.13-0.17	0.0-2.9	0.0-0.5	.43	.43			
	18-34	---	---	20-30	1.20-1.30	0.6-2	0.12-0.16	0.0-2.9	0.0-0.5	.43	.43			
	34-60	---	---	20-30	1.20-1.35	0.6-2	0.14-0.18	0.0-2.9	0.0-0.5	.43	.43			
204:														
Typic Natrargids	0-2	---	---	7-20	1.35-1.50	0.6-6	0.12-0.18	0.0-2.9	0.0-1.0	.28	.28	5	3	86
	2-18	---	---	25-45	1.20-1.35	0.0015-0.06	0.10-0.13	3.0-5.9	0.0-1.0	.20	.20			
	18-35	---	---	25-45	1.20-1.35	0.0015-0.06	0.10-0.13	3.0-5.9	0.0-1.0	.20	.20			
	35-60	---	---	28-38	1.15-1.30	0.2-0.6	0.05-0.11	3.0-6.0	0.0-1.0	.37	.37			
205:														
Uffens	0-4	---	---	12-14	1.15-1.25	0.2-0.6	0.12-0.14	0.0-2.9	0.5-1.0	.28	.28	3	3	86
	4-12	---	---	25-30	1.20-1.30	0.06-0.2	0.13-0.15	3.0-5.9	0.5-1.0	.24	.24			
	12-37	---	---	10-20	1.25-1.40	2-6	0.09-0.12	0.0-2.9	0.0-0.5	.32	.32			
	37-60	---	---	4-7	1.35-1.45	6-20	0.05-0.07	0.0-2.9	0.0-0.5	.20	.20			
206:														
Ustorthents, frigid	0-3	---	---	10-20	1.35-1.50	0.6-6	0.06-0.07	0.0-2.9	0.5-2.0	.10	.28	2	8	0
	3-28	---	---	15-35	1.20-1.35	0.6-6	0.05-0.12	0.0-2.9	0.5-1.0	.15	.24			
	28-32	---	---	---	---	0.06-0.2	---	---	---	---	---			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
206:														
Borolls	0-19	---	---	10-25	1.25-1.50	0.6-6	0.14-0.18	0.0-2.9	2.0-4.0	.24	.24	2	5	56
	19-30	---	---	10-35	1.25-1.50	0.2-0.6	0.05-0.21	0.0-2.9	0.5-1.0	.05	.28			
	30-34	---	---	---	---	0.06-0.2	---	---	---	---	---			
207:														
Vermillion	0-3	---	---	15-25	1.25-1.35	0.6-2	0.16-0.18	0.0-2.9	0.5-1.0	.37	.37	2	4L	86
	3-23	---	---	18-30	1.30-1.40	0.6-2	0.10-0.13	0.0-2.9	0.5-1.0	.15	.28			
	23-28	---	---	18-30	1.30-1.40	0.6-2	0.07-0.09	0.0-2.9	0.5-1.0	.05	.37			
	28-32	---	---	---	---	0.06-0.2	---	---	---	---	---			
Langspring	0-3	---	---	18-27	1.25-1.40	0.6-2	0.14-0.17	0.0-2.9	0.5-1.0	.37	.37	2	4L	86
	3-17	---	---	18-27	1.20-1.30	0.6-2	0.13-0.16	0.0-2.9	0.0-0.5	.32	.32			
	17-60	---	---	18-30	1.25-1.35	0.6-2	0.13-0.16	0.0-2.9	0.0-0.5	.32	.32			
208:														
Wallson	0-3	---	---	5-10	1.35-1.40	2-6	0.13-0.15	0.0-2.9	0.0-0.5	.32	.32	5	3	86
	3-38	---	---	10-18	1.40-1.50	2-6	0.13-0.15	0.0-2.9	0.0-0.5	.32	.32			
	38-48	---	---	3-12	1.45-1.60	2-6	0.05-0.15	0.0-2.9	0.0-0.5	.32	.32			
	48-60	---	---	10-25	1.25-1.50	0.6-6	0.13-0.18	0.0-2.9	0.0-0.5	.32	.32			
Tricera	0-4	---	---	8-12	1.25-1.35	2-6	0.08-0.11	0.0-2.9	0.5-1.0	.28	.28	5	2	134
	4-47	---	---	3-12	1.30-1.35	2-6	0.06-0.11	0.0-2.9	0.0-0.5	.24	.24			
	47-60	---	---	3-8	1.35-1.40	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.20	.20			
209:														
Weed	0-10	---	---	10-18	1.25-1.35	2-6	0.10-0.13	0.0-2.9	2.0-3.0	.24	.24	5	3	86
	10-28	---	---	20-30	1.25-1.35	0.6-2	0.14-0.18	0.0-2.9	1.0-2.0	.20	.20			
	28-41	---	---	20-27	1.25-1.35	0.6-2	0.13-0.17	0.0-2.9	0.5-1.0	.20	.20			
	41-60	---	---	10-20	1.35-1.45	2-6	0.08-0.11	0.0-2.9	0.5-1.0	.24	.24			
210:														
Willwood	0-8	---	---	8-14	1.45-1.50	2-6	0.06-0.08	0.0-2.9	0.5-1.0	.20	.20	5	2	134
	8-60	---	---	3-10	1.45-1.50	6-20	0.01-0.03	0.0-2.9	0.0-0.5	.05	.24			
Sheppard, cool	0-4	---	---	8-12	1.40-1.50	2-6	0.09-0.11	0.0-2.9	0.5-1.0	.28	.28	5	2	134
	4-60	---	---	8-12	1.40-1.50	6-20	0.07-0.10	0.0-2.9	0.0-0.5	.32	.32			
211:														
Willwood	0-2	---	---	5-10	1.45-1.50	6-20	0.03-0.06	0.0-2.9	0.5-1.0	.10	.28	5	8	0
	2-11	---	---	5-10	1.45-1.60	6-20	0.04-0.06	0.0-2.9	0.5-1.0	.10	.28			
	11-60	---	---	3-10	1.45-1.50	6-20	0.01-0.03	0.0-2.9	0.0-0.5	.05	.24			
Tipperary	0-3	---	---	5-12	1.45-1.55	6-20	0.08-0.11	0.0-2.9	0.0-0.5	.32	.32	5	2	134
	3-60	---	---	0-10	1.45-1.55	6-20	0.06-0.09	0.0-2.9	0.0-0.5	.24	.24			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
212:														
Willwood	0-10	---	---	8-14	1.45-1.50	2-6	0.06-0.08	0.0-2.9	0.5-1.0	.28	.28	5	2	134
	10-60	---	---	3-10	1.45-1.50	6-20	0.01-0.03	0.0-2.9	0.0-0.5	.05	.24			
Tipperary, cobbly substratum	0-4	---	---	6-12	1.45-1.55	2-6	0.08-0.11	0.0-2.9	0.0-1.0	.28	.28	4	2	134
	4-36	---	---	6-12	1.45-1.55	2-6	0.07-0.11	0.0-2.9	0.0-1.0	.28	.28			
	36-60	---	---	3-7	1.45-1.50	6-20	0.03-0.06	0.0-2.9	0.0-1.0	.05	.17			
213:														
Winevada	0-10	---	---	15-25	1.15-1.20	0.6-2	0.16-0.19	0.0-2.9	2.0-3.0	.28	.28	2	5	56
	10-25	---	---	18-27	1.25-1.30	0.6-2	0.16-0.20	0.0-2.9	2.0-3.0	.28	.28			
	25-29	---	---	---	---	0.06-0.2	---	---	---	---	---			
Splitro	0-1	---	---	0-5	---	---	---	---	---	---	---	1	3	86
	1-12	---	---	12-18	1.25-1.30	2-6	0.13-0.15	0.0-2.9	2.0-3.0	.24	.24			
	12-14	---	---	12-18	1.35-1.45	2-6	0.08-0.13	0.0-2.9	0.5-1.0	.15	.28			
	14-17	---	---	---	---	0.06-0.2	---	---	---	---	---			
214:														
Winevada	0-1	---	---	0-5	---	---	---	---	---	---	---	2	5	56
	1-11	---	---	15-25	1.15-1.20	0.6-2	0.16-0.19	0.0-2.9	2.0-3.0	.28	.28			
	11-26	---	---	18-27	1.25-1.30	0.6-2	0.16-0.20	0.0-2.9	2.0-3.0	.28	.28			
	26-29	---	---	---	---	0.06-0.2	---	---	---	---	---			
Splitro	0-1	---	---	0-5	---	---	---	---	---	---	---	1	3	86
	1-12	---	---	12-18	1.25-1.30	2-6	0.13-0.15	0.0-2.9	2.0-3.0	.24	.24			
	12-14	---	---	12-18	1.35-1.45	2-6	0.08-0.13	0.0-2.9	0.5-1.0	.15	.28			
	14-17	---	---	---	---	0.06-0.2	---	---	---	---	---			
215:														
Winkleman	0-6	---	---	32-40	1.20-1.30	0.2-0.6	0.16-0.20	3.0-5.9	0.5-1.0	.24	.24	5	4L	86
	6-60	---	---	20-40	1.20-1.25	0.06-0.2	0.16-0.20	3.0-5.9	0.0-0.5	.24	.24			
216:														
Yamo	0-5	---	---	18-27	1.20-1.30	0.6-2	0.14-0.17	0.0-2.9	1.0-2.0	.28	.28	5	4L	86
	5-22	---	---	20-30	1.30-1.40	0.6-2	0.16-0.19	0.0-2.9	0.5-1.0	.28	.28			
	22-60	---	---	18-27	1.30-1.40	0.6-2	0.13-0.16	0.0-2.9	0.0-0.5	.43	.43			
217:														
Yamo	0-5	---	---	18-27	1.20-1.30	0.6-2	0.14-0.17	0.0-2.9	1.0-2.0	.28	.28	5	4L	86
	5-22	---	---	20-30	1.30-1.40	0.6-2	0.16-0.19	0.0-2.9	0.5-1.0	.28	.28			
	22-60	---	---	18-27	1.30-1.40	0.6-2	0.13-0.16	0.0-2.9	0.0-0.5	.43	.43			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
218:														
Yellowwash----------	0-2	---	---	20-27	1.25-1.40	0.6-2	0.10-0.15	0.0-2.9	1.0-2.0	.17	.32	1	4L	86
	2-10	---	---	20-27	1.25-1.40	0.6-2	0.10-0.18	0.0-2.9	0.5-1.0	.20	.37			
	10-14	---	---	---	---	0.0000-0.0000	---	---	---	---	---			
Piezon--------------	0-4	---	---	18-27	1.25-1.40	0.6-2	0.16-0.18	0.0-2.9	1.0-2.0	.28	.28	3	4L	86
	4-30	---	---	18-27	1.25-1.40	0.6-2	0.16-0.19	0.0-2.9	0.5-1.0	.37	.37			
	30-34	---	---	---	---	0.06-2	---	---	---	---	---			
219:														
Youga---------------	0-13	---	---	18-22	1.10-1.20	0.6-2	0.16-0.18	0.0-2.9	2.0-3.0	.28	.28	5	5	56
	13-39	---	---	30-35	1.25-1.35	0.2-0.6	0.18-0.21	3.0-5.9	0.5-1.0	.24	.24			
	39-60	---	---	18-30	1.30-1.40	0.6-2	0.17-0.19	0.0-2.9	0.0-0.5	.24	.24			
220:														
Youga---------------	0-12	---	---	10-20	1.20-1.30	2-6	0.13-0.15	0.0-2.9	3.0-4.0	.15	.15	5	3	86
	12-24	---	---	20-27	1.25-1.35	0.6-2	0.14-0.17	0.0-2.9	0.5-1.0	.20	.20			
	24-36	---	---	18-25	1.30-1.40	2-6	0.13-0.16	0.0-2.9	0.0-0.5	.24	.24			
	36-60	---	---	15-20	1.30-1.40	2-6	0.13-0.15	0.0-2.9	0.0-0.5	.32	.32			
Dinnen--------------	0-10	---	---	8-18	1.25-1.30	2-6	0.13-0.15	0.0-2.9	2.0-3.0	.24	.24	5	3	86
	10-20	---	---	12-18	1.30-1.35	2-6	0.13-0.15	0.0-2.9	0.5-1.0	.28	.28			
	20-41	---	---	12-18	1.30-1.35	2-6	0.11-0.15	0.0-2.9	0.5-1.0	.15	.28			
	41-60	---	---	12-18	1.30-1.35	2-6	0.11-0.15	0.0-2.9	0.0-0.5	.15	.28			
221:														
Youga---------------	0-10	---	---	10-20	1.20-1.30	2-6	0.11-0.13	0.0-2.9	2.0-3.0	.15	.24	5	3	86
	10-42	---	---	20-27	1.25-1.35	0.6-2	0.14-0.17	0.0-2.9	0.5-1.0	.20	.20			
	42-60	---	---	15-20	1.30-1.40	2-6	0.13-0.15	0.0-2.9	0.0-0.5	.32	.32			
Gelkie--------------	0-2	---	---	12-18	1.30-1.40	2-6	0.08-0.11	0.0-2.9	2.0-3.0	.10	.24	5	8	0
	2-10	---	---	20-30	1.30-1.40	0.6-2	0.11-0.14	0.0-2.9	2.0-3.0	.10	.17			
	10-22	---	---	25-35	1.35-1.45	0.6-2	0.14-0.18	3.0-5.9	0.5-1.0	.20	.20			
	22-50	---	---	15-25	1.35-1.45	0.6-2	0.14-0.18	0.0-2.9	0.5-1.0	.28	.28			
	50-60	---	---	12-18	1.40-1.50	2-6	0.13-0.15	0.0-2.9	0.5-1.0	.28	.28			
Clayburn, warm------	0-2	---	---	0-5	---	---	---	---	---	---	---	5	3	86
	2-16	---	---	12-20	1.25-1.35	2-6	0.12-0.14	0.0-2.9	2.0-4.0	.20	.20			
	16-39	---	---	20-30	1.25-1.35	0.6-2	0.15-0.18	0.0-2.9	0.5-1.0	.20	.20			
	39-60	---	---	12-20	1.35-1.45	2-6	0.13-0.16	0.0-2.9	0.0-0.5	.32	.32			
222:														
Youngston, cool-----	0-9	---	---	18-25	1.20-1.30	0.6-2	0.12-0.16	0.0-2.9	0.5-1.0	.37	.37	5	4L	86
	9-60	---	---	20-30	1.25-1.35	0.6-2	0.16-0.20	0.0-2.9	0.0-0.5	.37	.37			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
223:														
Youngston, well drained	0-3	---	---	15-25	1.25-1.35	0.6-2	0.16-0.18	0.0-2.9	0.5-1.0	.37	.37	5	4L	86
	3-60	---	---	18-35	1.25-1.35	0.2-0.6	0.19-0.21	3.0-5.9	0.5-1.0	.32	.32			
224:														
Zillion	0-7	---	---	18-22	1.20-1.30	0.6-2	0.16-0.18	0.0-2.9	2.0-4.0	.24	.24	3	5	56
	7-18	---	---	18-22	1.25-1.35	0.6-2	0.12-0.14	0.0-2.9	1.0-3.0	.15	.28			
	18-26	---	---	20-30	1.30-1.40	0.6-2	0.07-0.09	3.0-5.9	0.5-1.0	.10	.28			
	26-60	---	---	22-27	1.35-1.45	0.6-2	0.06-0.08	0.0-2.9	0.0-0.5	.05	.20			
Barkelew, moist	0-2	---	---	15-25	1.20-1.30	0.6-2	0.07-0.11	0.0-2.9	1.0-2.0	.10	.28	2	8	0
	2-7	---	---	15-25	1.25-1.40	0.6-2	0.10-0.13	0.0-2.9	1.0-2.0	.15	.28			
	7-16	---	---	25-35	1.25-1.35	0.2-0.6	0.09-0.13	0.0-2.9	0.5-1.0	.10	.28			
	16-34	---	---	25-35	1.25-1.35	0.2-0.6	0.07-0.11	0.0-2.9	0.0-0.5	.10	.28			
	34-60	---	---	20-30	1.30-1.40	0.6-2	0.06-0.10	0.0-2.9	0.0-0.5	.10	.28			
Grapit	0-9	---	---	20-25	1.20-1.30	0.6-2	0.10-0.14	0.0-2.9	2.0-3.0	.15	.28	2	4L	86
	9-36	---	---	20-30	1.30-1.40	0.6-2	0.08-0.12	0.0-2.9	0.5-1.0	.10	.24			
	36-60	---	---	15-30	1.30-1.40	0.6-2	0.08-0.12	0.0-2.9	0.0-0.5	.10	.28			
225:														
Abracon	0-4	---	---	15-25	1.25-1.40	0.6-2	0.14-0.17	0.0-2.9	1.0-2.0	.37	.37	5	4L	86
	4-10	---	---	18-27	1.25-1.40	0.6-2	0.14-0.17	0.0-2.9	1.0-2.0	.37	.37			
	10-51	---	---	18-35	1.30-1.45	0.6-2	0.14-0.18	0.0-2.9	0.5-2.0	.37	.43			
	51-60	---	---	18-27	1.30-1.45	0.6-2	0.14-0.17	0.0-2.9	0.0-0.5	.32	.43			
Solirec	0-4	---	---	13-20	1.35-1.50	0.6-2	0.10-0.14	0.0-2.9	0.5-1.0	.32	.32	3	3	86
	4-12	---	---	20-27	1.25-1.40	0.6-2	0.13-0.19	3.0-5.9	0.0-1.0	.24	.24			
	12-19	---	---	20-27	1.25-1.40	0.6-2	0.13-0.19	0.0-2.9	0.0-0.5	.43	.43			
	19-75	---	---	28-32	1.30-1.45	0.6-2	0.14-0.20	3.0-5.9	0.0-0.5	.37	.37			
226:														
Arches	0-2	---	---	0-5	1.45-1.60	6-20	0.07-0.10	0.0-2.9	0.0-0.5	.32	.32	1	2	134
	2-5	---	---	0-5	1.45-1.60	6-20	0.07-0.10	0.0-2.9	0.0-0.5	.32	.32			
	5-9	---	---	0-5	1.45-1.60	6-20	0.06-0.08	0.0-2.9	0.0-0.5	.28	.28			
	9-13	---	---	---	---	0.0000-0.06	---	---	---	---	---			
Mespun	0-3	---	---	0-8	1.55-1.65	6-20	0.06-0.09	0.0-2.9	0.5-1.0	.24	.24	5	1	220
	3-60	---	---	0-8	1.45-1.55	6-20	0.06-0.09	0.0-2.9	0.5-1.0	.28	.28			
Rock outcrop	0-60	---	---	---	---	0.0000-0.06	0.00-0.00	---	---	---	---	-	8	0
227:														
Bankard family	0-2	---	---	0-5	1.45-1.60	20-20	0.05-0.08	0.0-2.9	0.0-1.0	.17	.17	5	1	220
	2-60	---	---	0-8	1.45-1.60	6-20	0.05-0.11	0.0-2.9	0.0-1.0	.20	.20			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
227:														
Cameo	0-2	---	---	3-9	1.45-1.60	6-20	0.08-0.11	0.0-2.9	0.5-2.0	.28	.28	5	2	134
	2-60	---	---	9-18	1.25-1.50	2-6	0.13-0.18	0.0-2.9	0.0-1.0	.32	.32			
228:														
Bondman	0-2	---	---	12-20	1.35-1.50	0.6-6	0.10-0.13	0.0-2.9	0.5-1.0	.28	.28	1	3	86
	2-8	---	---	20-30	1.25-1.40	0.2-2	0.14-0.18	0.0-2.9	0.0-0.6	.32	.32			
	8-12	---	---	---	---	0.0000-0.06	---	---	---	---	---			
Rock outcrop	0-60	---	---	---	---	0.0000-0.06	0.00-0.00	---	---	---	---	-	8	0
229:														
Cameo	0-2	---	---	3-9	1.45-1.60	6-20	0.08-0.11	0.0-2.9	0.5-2.0	.28	.28	5	2	134
	2-60	---	---	9-18	1.25-1.50	2-6	0.13-0.18	0.0-2.9	0.0-1.0	.32	.32			
230:														
Cragnot	0-3	---	---	12-20	1.25-1.40	0.6-2	0.07-0.09	0.0-2.9	0.0-2.0	.15	.37	2	8	0
	3-12	---	---	15-30	1.25-1.30	0.2-2	0.08-0.11	0.0-2.9	0.0-1.0	.15	.32			
	12-38	---	---	15-30	1.25-1.30	0.2-2	0.04-0.06	0.0-2.9	0.0-0.5	.05	.37			
	38-60	---	---	12-30	1.25-1.50	0.2-2	0.05-0.11	0.0-2.9	0.0-0.5	.10	.32			
Pensore	0-3	---	---	12-20	1.25-1.40	0.6-6	0.10-0.13	0.0-2.9	0.0-2.0	.20	.37	1	4L	86
	3-10	---	---	10-27	1.25-1.50	0.6-6	0.04-0.05	0.0-2.9	0.0-1.0	.05	.32			
	10-16	---	---	10-27	1.25-1.50	0.6-6	0.03-0.05	0.0-2.9	0.0-0.5	.05	.37			
	16-20	---	---	---	---	0.0000-0.06	---	---	---	---	---			
Grapit	0-5	---	---	15-25	1.25-1.40	0.6-6	0.10-0.13	0.0-2.9	2.0-3.0	.15	.28	2	4L	86
	5-14	---	---	15-25	1.25-1.40	0.6-6	0.07-0.09	0.0-2.9	2.0-3.0	.10	.28			
	14-30	---	---	20-27	1.25-1.40	0.6-2	0.04-0.05	0.0-2.9	0.5-1.0	.05	.32			
	30-54	---	---	20-27	1.25-1.40	0.6-2	0.04-0.05	0.0-2.9	0.0-0.5	.05	.43			
	54-60	---	---	15-25	1.25-1.40	0.6-6	0.07-0.09	0.0-2.9	0.0-0.5	.15	.43			
231:														
Green River	0-5	---	---	8-19	1.35-1.50	2-6	0.10-0.13	0.0-2.9	0.5-1.0	.37	.37	5	3	86
	5-60	---	---	5-18	1.30-1.55	0.6-6	0.06-0.11	0.0-2.9	0.0-0.5	.32	.32			
Fluvaquents	0-5	---	---	0-10	1.45-1.60	20-20	0.05-0.08	0.0-2.9	0.0-3.0	.20	.20	5	1	250
	5-60	---	---	0-27	1.25-1.60	0.6-20	0.05-0.18	0.0-2.9	0.0-2.0	.24	.24			
232:														
Lakebench	0-3	---	---	5-10	1.45-1.60	6-20	0.08-0.11	0.0-2.9	0.5-1.0	.28	.28	2	2	134
	3-9	---	---	10-15	1.25-1.40	2-6	0.14-0.18	0.0-2.9	0.0-0.5	.37	.37			
	9-45	---	---	10-18	1.25-1.40	2-6	0.14-0.18	0.0-2.9	0.0-0.5	.43	.43			
	45-50	---	---	10-18	1.25-1.40	2-6	0.10-0.13	0.0-2.9	0.0-0.5	.24	.43			
	50-60	---	---	10-18	1.25-1.40	2-6	0.14-0.18	0.0-2.9	0.0-0.5	.43	.43			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
232:														
Strell	0-3	---	---	3-9	1.45-1.60	6-20	0.08-0.11	0.0-2.9	0.5-1.0	.28	.28	1	2	134
	3-13	---	---	0-9	1.45-1.60	6-20	0.05-0.11	0.0-2.9	0.0-0.5	.28	.28			
	13-17	---	---	---	---	0.0000-0.06	---	---	---	---	---			
233:														
Lakebench	0-3	---	---	10-15	1.15-1.30	2-6	0.14-0.18	0.0-2.9	0.5-1.0	.43	.43	2	4L	86
	3-9	---	---	10-15	1.25-1.40	2-6	0.14-0.18	0.0-2.9	0.0-0.5	.37	.37			
	9-45	---	---	10-18	1.25-1.40	2-6	0.14-0.18	0.0-2.9	0.0-0.5	.43	.43			
	45-50	---	---	10-18	1.25-1.40	2-6	0.10-0.13	0.0-2.9	0.0-0.5	.24	.43			
	50-60	---	---	10-18	1.25-1.40	2-6	0.14-0.18	0.0-2.9	0.0-0.5	.43	.43			
Yampa	0-7	---	---	10-15	1.25-1.40	2-6	0.07-0.09	0.0-2.9	0.5-1.0	.15	.37	5	8	0
	7-13	---	---	10-20	1.25-1.40	0.6-6	0.04-0.05	0.0-2.9	0.0-0.5	.05	.43			
	13-31	---	---	18-35	1.25-1.40	0.2-2	0.07-0.11	0.0-2.9	0.0-0.5	.15	.43			
	31-60	---	---	5-10	1.35-1.60	2-20	0.02-0.04	0.0-2.9	0.0-0.5	.05	.32			
234:														
Mantlemine	0-5	---	---	12-20	1.25-1.40	0.6-6	0.14-0.18	0.0-2.9	0.0-2.0	.37	.37	5	5	56
	5-20	---	---	18-35	1.25-1.30	0.2-2	0.15-0.21	3.0-5.9	0.0-0.6	.37	.37			
	20-25	---	---	18-35	1.25-1.30	0.2-2	0.15-0.21	3.0-5.9	0.0-0.5	.37	.37			
	25-45	---	---	22-35	1.25-1.40	0.2-2	0.14-0.21	0.0-2.9	0.0-0.5	.37	.37			
	45-60	---	---	18-27	1.25-1.30	0.6-2	0.14-0.20	0.0-2.9	0.0-0.5	.43	.43			
235:														
Mantlemine	0-5	---	---	12-20	1.25-1.40	0.6-6	0.14-0.18	0.0-2.9	0.0-2.0	.37	.37	5	5	56
	5-20	---	---	18-35	1.25-1.30	0.2-2	0.15-0.21	3.0-5.9	0.0-0.6	.37	.37			
	20-25	---	---	18-35	1.25-1.30	0.2-2	0.15-0.21	3.0-5.9	0.0-0.5	.37	.37			
	25-45	---	---	22-35	1.25-1.40	0.2-2	0.14-0.21	0.0-2.9	0.0-0.5	.37	.37			
	45-60	---	---	18-27	1.25-1.30	0.6-2	0.14-0.20	0.0-2.9	0.0-0.5	.43	.43			
Emlin	0-11	---	---	20-25	1.25-1.40	0.6-2	0.13-0.16	0.0-2.9	2.0-4.0	.24	.24	5	4L	86
	11-19	---	---	28-34	1.25-1.40	0.2-0.6	0.16-0.19	3.0-5.9	0.5-1.0	.24	.24			
	19-60	---	---	27-34	1.15-1.30	0.2-0.6	0.16-0.19	3.0-5.9	0.0-1.0	.37	.37			
236:														
Mido	0-8	---	---	5-10	1.45-1.60	6-20	0.08-0.11	0.0-2.9	0.0-0.5	.32	.32	5	2	134
	8-60	---	---	5-10	1.45-1.60	6-20	0.08-0.11	0.0-2.9	0.0-0.5	.32	.32			
237:														
Mikim loam	0-6	---	---	20-27	1.20-1.30	0.6-2	0.17-0.18	3.0-5.9	1.0-2.0	.43	.43	5	4L	86
	6-60	---	---	20-35	1.10-1.25	0.6-2	0.14-0.18	3.0-5.9	0.0-0.5	.32	.32			
Mikim silt loam	0-6	---	---	18-27	1.15-1.30	0.6-2	0.15-0.17	0.0-2.9	1.0-2.0	.49	.49	5	4L	86
	6-60	---	---	18-30	1.25-1.40	0.2-2	0.12-0.17	3.0-5.9	0.0-1.0	.43	.43			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
238:														
Milok	0-4	---	---	5-18	1.35-1.45	2-6	0.10-0.13	0.0-2.9	1.0-2.0	.24	.24	5	3	86
	4-15	---	---	10-18	1.35-1.45	2-6	0.10-0.13	0.0-2.9	0.5-1.0	.24	.24			
	15-37	---	---	10-18	1.35-1.45	2-6	0.10-0.13	0.0-2.9	0.0-0.5	.24	.24			
	37-50	---	---	10-18	1.35-1.45	2-6	0.10-0.13	0.0-2.9	0.0-0.5	.24	.24			
	50-60	---	---	5-18	1.35-1.45	2-6	0.09-0.12	0.0-2.9	0.0-0.5	.24	.24			
239:														
Milok	0-4	---	---	5-18	1.35-1.45	2-6	0.10-0.13	0.0-2.9	1.0-2.0	.24	.24	5	3	86
	4-15	---	---	10-18	1.35-1.45	2-6	0.10-0.13	0.0-2.9	0.5-1.0	.24	.24			
	15-37	---	---	10-18	1.35-1.45	2-6	0.10-0.13	0.0-2.9	0.0-0.5	.24	.24			
	37-50	---	---	10-18	1.35-1.45	2-6	0.10-0.13	0.0-2.9	0.0-0.5	.24	.24			
	50-60	---	---	5-18	1.35-1.45	2-6	0.09-0.12	0.0-2.9	0.0-0.5	.24	.24			
Solirec	0-8	---	---	12-24	1.25-1.40	0.6-6	0.14-0.18	0.0-2.9	0.5-1.0	.37	.37	5	4L	86
	8-52	---	---	18-35	1.25-1.40	0.2-2	0.14-0.21	0.0-2.9	0.0-0.5	.37	.37			
	52-60	---	---	12-35	1.25-1.50	0.2-6	0.13-0.21	0.0-2.9	0.0-0.5	.32	.32			
Strych	0-5	---	---	12-16	1.25-1.40	0.6-6	0.10-0.13	0.0-2.9	0.6-1.0	.20	.37	5	4L	86
	5-10	---	---	12-18	1.25-1.50	0.6-6	0.07-0.13	0.0-2.9	0.0-0.6	.20	.37			
	10-34	---	---	12-18	1.25-1.50	0.6-6	0.05-0.09	0.0-2.9	0.0-0.6	.10	.37			
	34-50	---	---	12-18	1.25-1.50	0.6-6	0.05-0.09	0.0-2.9	0.0-0.6	.10	.37			
	50-60	---	---	6-18	1.25-1.60	0.6-20	0.08-0.18	0.0-2.9	0.0-0.5	.37	.37			
240:														
Milok	0-6	---	---	5-10	1.35-1.50	2-6	0.11-0.13	0.0-2.9	0.5-1.0	.37	.37	5	3	86
	6-12	---	---	12-17	1.25-1.40	2-6	0.15-0.17	0.0-2.9	0.5-1.0	.43	.43			
	12-37	---	---	12-17	1.25-1.40	2-6	0.15-0.17	0.0-2.9	0.0-0.5	.43	.43			
	37-44	---	---	10-15	1.15-1.30	2-6	0.16-0.18	0.0-2.9	0.0-0.5	.55	.55			
	44-60	---	---	10-15	1.25-1.40	2-6	0.15-0.17	0.0-2.9	0.0-0.5	.49	.49			
Strych	0-8	---	---	8-13	1.35-1.50	2-6	0.05-0.10	0.0-2.9	0.5-1.0	.10	.37	5	6	48
	8-39	---	---	8-13	1.35-1.50	2-6	0.04-0.07	0.0-2.9	0.0-0.5	.02	.28			
	39-60	---	---	3-8	1.45-1.60	6-20	0.03-0.06	0.0-2.9	0.0-0.5	.02	.20			
241:														
Pensore	0-3	---	---	12-20	1.25-1.40	0.6-6	0.10-0.13	0.0-2.9	0.0-2.0	.20	.37	1	4L	86
	3-10	---	---	10-27	1.25-1.50	0.6-6	0.04-0.05	0.0-2.9	0.0-1.0	.05	.32			
	10-16	---	---	10-27	1.25-1.50	0.6-6	0.03-0.05	0.0-2.9	0.0-0.5	.05	.37			
	16-20	---	---	---	---	0.0000-0.06	---	---	---	---	---			
Roto	0-2	---	---	10-20	1.25-1.40	0.6-6	0.07-0.09	0.0-2.9	0.5-2.0	.15	.37	2	8	0
	2-9	---	---	10-27	1.25-1.50	0.6-6	0.07-0.09	0.0-2.9	0.0-0.7	.10	.28			
	9-22	---	---	10-27	1.25-1.50	0.6-6	0.04-0.05	0.0-2.9	0.0-0.5	.05	.28			
	22-26	---	---	---	---	0.0000-0.06	---	---	---	---	---			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
242:														
Riverwash----------	0-6	---	---	0-1	---	6-20	0.03-0.04	0.0-2.9	0.0-0.1	---	---	-	1	180
	6-60	---	---	0-5	---	6-20	0.04-0.06	0.0-2.9	---	---	---			
243:														
Rizno---------------	0-5	---	---	10-18	1.35-1.50	2-6	0.10-0.11	0.0-2.9	0.5-1.0	.15	.28	1	3	86
	5-15	---	---	10-18	1.25-1.50	2-6	0.10-0.13	0.0-2.9	0.0-0.6	.20	.37			
	15-19	---	---	---	---	0.0000-0.06	---	---	---	---	---			
Windcomb------------	0-4	---	---	18-27	1.15-1.30	0.2-0.6	0.07-0.12	0.0-2.9	0.5-1.0	.15	.43	1	6	48
	4-17	---	---	13-18	1.25-1.40	0.6-2	0.07-0.11	0.0-2.9	0.0-0.5	.15	.43			
	17-21	---	---	---	---	0.0000-0.06	---	---	---	---	---			
Anasazi-------------	0-3	---	---	10-18	1.35-1.50	2-6	0.12-0.14	0.0-2.9	0.6-1.0	.28	.28	2	3	86
	3-10	---	---	10-18	1.25-1.50	2-6	0.10-0.13	0.0-2.9	0.0-0.6	.20	.37			
	10-19	---	---	10-18	1.25-1.50	2-6	0.10-0.13	0.0-2.9	0.0-0.5	.20	.37			
	19-24	---	---	5-18	1.25-1.60	2-20	0.03-0.09	0.0-2.9	0.0-0.5	.15	.37			
	24-28	---	---	---	---	0.0000-0.06	---	---	---	---	---			
244:														
Rock outcrop--------	0-60	---	---	---	---	0.0000-0.06	0.00-0.00	---	---	---	---	-	8	0
Hackling------------	0-1	---	---	5-12	1.35-1.50	2-6	0.07-0.10	0.0-2.9	1.0-2.0	.05	.24	1	3	86
	1-4	---	---	12-18	1.35-1.50	2-6	0.05-0.07	0.0-2.9	0.5-1.0	.10	.28			
	4-15	---	---	12-18	1.35-1.50	2-6	0.03-0.04	0.0-2.9	0.0-0.5	.05	.32			
	15-19	---	---	---	---	0.0000-0.06	---	---	---	---	---			
245:														
Rock outcrop--------	0-60	---	---	---	---	0.0000-0.06	0.00-0.00	---	---	---	---	-	8	0
Torriorthents-------	0-4	---	---	10-35	1.25-1.50	0.2-6	0.05-0.11	0.0-2.9	0.5-2.0	.10	.28	1	8	0
	4-18	---	---	10-45	1.15-1.50	0.06-6	0.05-0.08	0.0-2.9	0.0-0.6	.10	.24			
	18-22	---	---	---	---	0.0000-0.06	---	---	---	---	---			
Ustorthents---------	0-6	---	---	10-25	1.25-1.40	0.6-6	0.10-0.13	0.0-2.9	0.5-2.0	.20	.37	2	4L	86
	6-33	---	---	20-30	1.25-1.40	0.2-2	0.10-0.13	0.0-2.9	0.0-1.0	.10	.20			
	33-37	---	---	---	---	0.0000-0.06	---	---	---	---	---			
246:														
Schoonover----------	0-3	---	---	18-27	1.25-1.40	0.6-2	0.07-0.09	0.0-2.9	0.5-1.0	.15	.37	1	8	0
	3-8	---	---	18-27	1.25-1.40	0.6-2	0.07-0.09	0.0-2.9	0.0-0.5	.15	.43			
	8-11	---	---	18-27	1.25-1.40	0.6-2	0.07-0.09	0.0-2.9	0.0-0.5	.15	.43			
	11-14	---	---	---	---	0.0000-0.6	---	---	---	---	---			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
246:														
Duffymont	0-13	---	---	8-13	1.35-1.50	2-6	0.03-0.08	0.0-2.9	2.0-3.0	.05	.28	1	8	0
	13-17	---	---	10-18	1.35-1.50	2-6	0.03-0.08	0.0-2.9	1.0-2.0	.05	.37			
	17-21	---	---	---	---	0.0000-0.06	---	---	---	---	---			
247:														
Stout	0-2	---	---	5-15	1.35-1.50	2-6	0.09-0.12	0.0-2.9	0.5-1.0	.28	.28	1	3	86
	2-11	---	---	5-15	1.35-1.50	2-6	0.10-0.13	0.0-2.9	0.0-0.5	.32	.32			
	11-15	---	---	---	---	0.0000-0.06	---	---	---	---	---			
Rock outcrop	0-60	---	---	---	---	0.0000-0.06	0.00-0.00	---	---	---	---	-	8	0
248:														
Strych	0-5	---	---	12-16	1.25-1.40	0.6-6	0.10-0.13	0.0-2.9	0.6-1.0	.20	.37	5	4L	86
	5-10	---	---	12-18	1.25-1.50	0.6-6	0.07-0.13	0.0-2.9	0.0-0.6	.20	.37			
	10-34	---	---	12-18	1.25-1.50	0.6-6	0.05-0.09	0.0-2.9	0.0-0.6	.10	.37			
	34-50	---	---	12-18	1.25-1.50	0.6-6	0.05-0.09	0.0-2.9	0.0-0.6	.10	.37			
	50-60	---	---	6-18	1.25-1.60	0.6-20	0.08-0.18	0.0-2.9	0.0-0.5	.37	.37			
Mellenthin	0-2	---	---	8-17	1.35-1.50	2-6	0.05-0.07	0.0-2.9	0.5-1.0	.10	.28	1	8	0
	2-12	---	---	8-17	1.25-1.50	2-6	0.05-0.09	0.0-2.9	0.0-0.6	.15	.37			
	12-16	---	---	---	---	0.0000-0.06	---	---	---	---	---			
249:														
Zillion	0-7	---	---	18-22	1.25-1.40	0.6-2	0.13-0.16	0.0-2.9	2.0-4.0	.24	.24	3	5	56
	7-18	---	---	18-22	1.25-1.40	0.6-2	0.10-0.13	0.0-2.9	1.0-3.0	.15	.28			
	18-26	---	---	20-27	1.25-1.40	0.6-2	0.07-0.09	0.0-2.9	0.5-1.0	.15	.37			
	26-34	---	---	25-32	1.25-1.40	0.6-2	0.07-0.09	0.0-2.9	0.0-0.5	.10	.24			
	34-60	---	---	25-30	1.25-1.40	0.6-2	0.04-0.05	0.0-2.9	0.0-0.5	.05	.24			
Yampa	0-7	---	---	10-15	1.25-1.40	2-6	0.07-0.09	0.0-2.9	0.5-1.0	.15	.37	5	8	0
	7-13	---	---	10-20	1.25-1.40	0.6-6	0.04-0.05	0.0-2.9	0.0-0.5	.05	.43			
	13-31	---	---	18-35	1.25-1.40	0.2-2	0.07-0.11	0.0-2.9	0.0-0.5	.15	.43			
	31-60	---	---	5-10	1.35-1.60	2-20	0.02-0.04	0.0-2.9	0.0-0.5	.05	.32			
Clyl	0-2	---	---	10-18	1.05-1.15	0.6-2	0.11-0.13	0.0-2.9	2.0-4.0	.15	.37	3	6	48
	2-9	---	---	10-18	1.10-1.40	0.6-2	0.12-0.14	0.0-2.9	1.0-2.0	.20	.43			
	9-19	---	---	18-26	1.20-1.40	0.6-2	0.09-0.11	0.0-2.9	0.5-1.0	.15	.43			
	19-29	---	---	18-26	1.25-1.40	0.6-2	0.09-0.11	0.0-2.9	0.0-0.5	.10	.43			
	29-60	---	---	18-26	1.25-1.40	0.6-2	0.06-0.08	0.0-2.9	0.0-0.5	.05	.43			
250:														
Abracon	0-4	---	---	15-25	1.25-1.40	0.6-2	0.14-0.17	0.0-2.9	1.0-2.0	.37	.37	5	4L	86
	4-10	---	---	18-27	1.25-1.40	0.6-2	0.14-0.17	0.0-2.9	1.0-2.0	.37	.37			
	10-51	---	---	18-35	1.30-1.45	0.6-2	0.14-0.18	0.0-2.9	0.5-2.0	.37	.43			
	51-60	---	---	18-27	1.30-1.45	0.6-2	0.14-0.17	0.0-2.9	0.0-0.5	.32	.43			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
251:														
Badland	0-2	---	---	40-60	1.15-1.30	0.0015-0.2	0.00-0.12	6.0-8.9	0.0-0.0	.10	.20	1	4	86
	2-12	---	---	---	---	0.0001-0.2	---	---	---	---	---			
Renegade	0-4	---	---	7-18	1.35-1.50	2-6	0.07-0.08	0.0-2.9	2.0-4.0	.05	.20	3	6	48
	4-15	---	---	7-18	1.35-1.50	2-6	0.10-0.11	0.0-2.9	2.0-4.0	.10	.20			
	15-47	---	---	7-18	1.35-1.50	2-6	0.07-0.08	0.0-2.9	1.0-2.0	.10	.24			
	47-58	---	---	7-18	1.35-1.50	2-6	0.03-0.04	0.0-2.9	0.5-1.0	.05	.28			
	58-62	---	---	---	---	0.06-0.2	---	---	---	---	---			
252:														
Bigtom	0-1	---	---	0-5	---	20-40	---	---	---	---	---	5	8	0
	1-7	---	---	10-20	1.25-1.40	0.6-6	0.04-0.05	0.0-2.9	2.0-4.0	.05	.24			
	7-12	---	---	10-20	1.25-1.40	0.6-6	0.04-0.05	0.0-2.9	1.0-3.0	.05	.28			
	12-41	---	---	28-35	1.25-1.40	0.2-0.6	0.05-0.06	0.0-2.9	1.0-2.0	.02	.20			
	41-61	---	---	20-35	1.25-1.40	0.2-0.6	0.04-0.05	0.0-2.9	1.0-2.0	.02	.17			
Namlot	0-3	---	---	8-18	1.35-1.50	2-6	0.03-0.04	0.0-2.9	2.0-4.0	.05	.24	1	8	0
	3-7	---	---	18-27	1.25-1.40	0.6-2	0.07-0.09	0.0-2.9	2.0-4.0	.05	.17			
	7-17	---	---	18-27	1.25-1.40	0.6-2	0.04-0.05	0.0-2.9	1.0-2.0	.02	.17			
	17-21	---	---	---	---	0.2-2	---	---	---	---	---			
Dokie	0-4	---	---	0-5	---	20-40	---	---	---	---	---	5	8	0
	4-7	---	---	14-25	1.25-1.40	0.6-6	0.04-0.05	0.0-2.9	2.0-4.0	.05	.24			
	7-16	---	---	14-25	1.25-1.40	0.6-6	0.04-0.05	0.0-2.9	2.0-4.0	.05	.24			
	16-36	---	---	18-27	1.25-1.40	0.6-2	0.04-0.05	0.0-2.9	1.0-2.0	.05	.28			
	36-64	---	---	14-20	1.35-1.50	0.6-6	0.03-0.04	0.0-2.9	0.5-1.0	.05	.28			
253:														
Clapper	0-7	---	---	16-27	1.25-1.40	0.6-6	0.10-0.13	0.0-2.9	1.0-2.0	.15	.28	5	5	56
	7-13	---	---	18-27	1.25-1.40	0.6-6	0.10-0.13	0.0-2.9	0.5-1.0	.20	.37			
	13-36	---	---	18-27	1.25-1.40	0.6-6	0.07-0.09	0.0-2.9	0.5-1.0	.15	.37			
	36-49	---	---	18-27	1.25-1.40	0.6-6	0.07-0.09	0.0-2.9	0.5-1.0	.15	.37			
	49-60	---	---	20-27	1.25-1.40	0.6-6	0.04-0.05	0.0-2.9	0.0-0.5	.05	.24			
254:														
Cliff	0-4	---	---	8-16	1.35-1.50	2-6	0.09-0.12	0.0-2.9	1.0-2.0	.24	.24	5	3	86
	4-60	---	---	5-18	1.35-1.50	2-6	0.09-0.12	0.0-2.9	0.0-0.5	.32	.32			
255:														
Clyl	0-2	---	---	10-18	1.15-1.30	2-6	0.08-0.10	0.0-2.9	2.0-4.0	.10	.32	2	6	48
	2-9	---	---	10-18	1.15-1.30	2-6	0.11-0.15	0.0-2.9	1.0-2.0	.20	.37			
	9-19	---	---	18-27	1.15-1.30	0.6-2	0.08-0.10	0.0-2.9	0.5-1.0	.15	.43			
	19-29	---	---	18-27	1.25-1.40	0.6-2	0.07-0.09	0.0-2.9	0.0-0.5	.15	.43			
	29-60	---	---	18-27	1.25-1.40	0.6-2	0.04-0.05	0.0-2.9	0.0-0.5	.05	.43			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
255:														
Pinerid	0-2	---	---	15-27	1.15-1.30	0.6-6	0.08-0.10	0.0-2.9	3.0-5.0	.10	.28	1	6	48
	2-6	---	---	15-27	1.15-1.30	0.6-6	0.08-0.10	0.0-2.9	2.0-4.0	.10	.32			
	6-13	---	---	18-27	1.15-1.30	0.6-2	0.04-0.06	0.0-2.9	1.0-2.0	.05	.37			
	13-17	---	---	---	---	0.0000-0.06	---	---	---	---	---			
256:														
Cortyzack	0-3	---	---	20-27	1.15-1.25	0.6-2	0.13-0.19	0.0-2.9	2.0-4.0	.20	.20	5	6	48
	3-12	---	---	28-32	1.25-1.40	0.6-2	0.14-0.20	3.0-5.9	2.0-4.0	.17	.17			
	12-23	---	---	28-32	1.25-1.40	0.6-2	0.14-0.20	3.0-5.9	1.0-2.0	.32	.32			
	23-48	---	---	28-32	1.25-1.40	0.6-2	0.14-0.20	3.0-5.9	0.5-1.0	.32	.32			
	48-72	---	---	18-25	1.25-1.40	0.6-2	0.13-0.19	0.0-2.9	0.0-0.5	.37	.43			
	72-76	---	---	18-25	1.25-1.40	0.6-2	0.13-0.19	0.0-2.9	0.0-0.5	.43	.43			
Diagulch	0-9	---	---	18-27	1.25-1.40	0.6-2	0.14-0.18	0.0-2.9	2.0-4.0	.24	.24	4	6	48
	9-34	---	---	18-27	1.25-1.40	0.6-2	0.14-0.18	0.0-2.9	1.0-2.0	.28	.28			
	34-53	---	---	7-18	1.35-1.50	2-6	0.09-0.12	0.0-2.9	0.5-1.0	.28	.28			
	53-60	---	---	5-13	1.45-1.60	6-20	0.04-0.06	0.0-2.9	0.5-1.0	.10	.20			
257:														
Cortyzack	0-3	---	---	20-27	1.15-1.25	0.6-2	0.13-0.19	0.0-2.9	2.0-4.0	.20	.20	5	6	48
	3-12	---	---	28-32	1.25-1.40	0.6-2	0.14-0.20	3.0-5.9	2.0-4.0	.17	.17			
	12-23	---	---	28-32	1.25-1.40	0.6-2	0.14-0.20	3.0-5.9	1.0-2.0	.32	.32			
	23-48	---	---	28-32	1.25-1.40	0.6-2	0.14-0.20	3.0-5.9	0.5-1.0	.32	.32			
	48-72	---	---	18-25	1.25-1.40	0.6-2	0.13-0.19	0.0-2.9	0.0-0.5	.37	.43			
	72-76	---	---	18-25	1.25-1.40	0.6-2	0.13-0.19	0.0-2.9	0.0-0.5	.43	.43			
Duffymont	0-13	---	---	8-13	1.35-1.50	2-6	0.03-0.08	0.0-2.9	2.0-3.0	.05	.28	1	8	0
	13-17	---	---	10-18	1.35-1.50	2-6	0.03-0.08	0.0-2.9	1.0-2.0	.05	.37			
	17-21	---	---	---	---	0.06-0.2	---	---	---	---	---			
258:														
Cortyzack	0-3	---	---	20-27	1.15-1.25	0.6-2	0.13-0.19	0.0-2.9	2.0-4.0	.20	.20	5	6	48
	3-12	---	---	28-32	1.25-1.40	0.6-2	0.14-0.20	3.0-5.9	2.0-4.0	.17	.17			
	12-23	---	---	28-32	1.25-1.40	0.6-2	0.14-0.20	3.0-5.9	1.0-2.0	.32	.32			
	23-48	---	---	28-32	1.25-1.40	0.6-2	0.14-0.20	3.0-5.9	0.5-1.0	.32	.32			
	48-72	---	---	18-25	1.25-1.40	0.6-2	0.13-0.19	0.0-2.9	0.0-0.5	.37	.43			
	72-76	---	---	18-25	1.25-1.40	0.6-2	0.13-0.19	0.0-2.9	0.0-0.5	.43	.43			
Flynncove	0-8	---	---	13-25	1.25-1.40	0.6-6	0.10-0.13	0.0-2.9	2.0-4.0	.15	.24	5	6	48
	8-15	---	---	27-35	1.25-1.40	0.6-2	0.10-0.13	3.0-5.9	1.0-2.0	.10	.17			
	15-37	---	---	27-35	1.25-1.40	0.6-2	0.04-0.05	0.0-2.9	1.0-2.0	.02	.17			
	37-60	---	---	14-20	1.35-1.50	0.6-6	0.03-0.04	0.0-2.9	0.5-1.0	.05	.28			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
259:														
Denco	0-4	---	---	27-40	1.15-1.30	0.06-0.6	0.17-0.21	3.0-5.9	0.5-1.0	.32	.32	3	4L	86
	4-37	---	---	40-50	1.15-1.30	0.06-0.2	0.14-0.17	6.0-8.9	0.5-1.0	.24	.24			
	37-41	---	---	---	---	0.06-0.2	---	---	---	---	---			
Gerst	0-2	---	---	18-27	1.25-1.40	0.6-2	0.13-0.16	0.0-2.9	0.5-1.0	.37	.37	2	4L	86
	2-12	---	---	18-27	1.25-1.40	0.6-2	0.13-0.16	0.0-2.9	0.0-0.5	.43	.43			
	12-22	---	---	---	---	0.06-0.2	---	---	---	---	---			
260:														
Dokie	0-4	---	---	0-5	---	20-40	---	---	---	---	---	5	8	0
	4-7	---	---	14-25	1.25-1.40	0.6-6	0.04-0.05	0.0-2.9	2.0-4.0	.05	.24			
	7-16	---	---	14-25	1.25-1.40	0.6-6	0.04-0.05	0.0-2.9	2.0-4.0	.05	.24			
	16-36	---	---	18-27	1.25-1.40	0.6-2	0.04-0.05	0.0-2.9	1.0-2.0	.05	.28			
	36-64	---	---	14-20	1.35-1.50	0.6-6	0.03-0.04	0.0-2.9	0.5-1.0	.05	.28			
Flynncove	0-8	---	---	14-20	1.25-1.40	0.6-6	0.04-0.05	0.0-2.9	2.0-4.0	.05	.24	5	8	0
	8-13	---	---	14-20	1.35-1.50	0.6-6	0.03-0.04	0.0-2.9	1.0-2.0	.05	.24			
	13-40	---	---	27-35	1.25-1.40	0.6-2	0.04-0.05	0.0-2.9	1.0-2.0	.02	.17			
	40-60	---	---	27-35	1.25-1.40	0.6-2	0.04-0.05	0.0-2.9	0.5-1.0	.02	.20			
261:														
Dokie	0-4	---	---	0-5	---	20-40	---	---	---	---	---	5	8	0
	4-7	---	---	14-25	1.25-1.40	0.6-6	0.04-0.05	0.0-2.9	2.0-4.0	.05	.24			
	7-16	---	---	14-25	1.25-1.40	0.6-6	0.04-0.05	0.0-2.9	2.0-4.0	.05	.24			
	16-36	---	---	18-27	1.25-1.40	0.6-2	0.04-0.05	0.0-2.9	1.0-2.0	.05	.28			
	36-64	---	---	14-20	1.35-1.50	0.6-6	0.03-0.04	0.0-2.9	0.5-1.0	.05	.28			
Namlot	0-3	---	---	8-18	1.35-1.50	2-6	0.03-0.04	0.0-2.9	2.0-4.0	.05	.24	1	8	0
	3-7	---	---	18-27	1.25-1.40	0.6-2	0.07-0.09	0.0-2.9	2.0-4.0	.05	.17			
	7-17	---	---	18-27	1.25-1.40	0.6-2	0.04-0.05	0.0-2.9	1.0-2.0	.02	.17			
	17-21	---	---	---	---	0.2-2	---	---	---	---	---			
262:														
Gompers	0-3	---	---	15-25	1.15-1.30	0.6-6	0.08-0.10	0.0-2.9	2.0-3.0	.15	.37	1	6	48
	3-8	---	---	15-25	1.25-1.40	0.6-6	0.07-0.09	0.0-2.9	2.0-3.0	.10	.28			
	8-18	---	---	8-18	1.25-1.40	2-6	0.04-0.05	0.0-2.9	1.0-2.0	.05	.28			
	18-22	---	---	---	---	0.06-0.2	---	---	---	---	---			
263:														
Hanksville	0-3	---	---	35-40	1.20-1.40	0.06-0.2	0.15-0.18	3.0-5.9	0.0-1.0	.43	.43	3	4L	86
	3-33	---	---	36-55	1.30-1.50	0.01-0.06	0.10-0.17	6.0-8.9	0.0-0.5	.32	.32			
	33-37	---	---	---	---	0.01-0.06	---	---	---	---	---			

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
264:														
Mikim	0-6	---	---	20-27	1.20-1.30	0.6-2	0.17-0.18	3.0-5.9	1.0-2.0	.43	.43	5	4L	86
	6-60	---	---	20-35	1.10-1.25	0.6-2	0.14-0.18	3.0-5.9	0.0-0.5	.32	.32			
265:														
Mikim	0-6	---	---	18-27	1.15-1.30	0.6-2	0.15-0.17	0.0-2.9	1.0-2.0	.49	.49	5	4L	86
	6-60	---	---	18-30	1.25-1.40	0.2-2	0.12-0.17	3.0-5.9	0.0-1.0	.43	.43			
266:														
Rock outcrop	0-60	---	---	---	---	---	0.00-0.00	---	---	---	---	-	8	0
Boxring	0-6	---	---	8-18	1.35-1.50	2-6	0.03-0.04	0.0-2.9	1.0-3.0	.05	.24	1	8	0
	6-14	---	---	18-27	1.25-1.40	0.6-2	0.04-0.05	0.0-2.9	1.0-2.0	.02	.17			
	14-18	---	---	---	---	0.2-2	---	---	---	---	---			
Tridell	0-2	---	---	16-25	1.25-1.40	0.6-2	0.07-0.09	0.0-2.9	1.0-3.0	.05	.28	2	8	0
	2-8	---	---	16-25	1.25-1.40	0.6-2	0.07-0.09	0.0-2.9	1.0-2.0	.10	.28			
	8-37	---	---	16-25	1.25-1.40	0.6-2	0.07-0.09	0.0-2.9	0.5-1.0	.15	.37			
	37-60	---	---	16-25	1.25-1.40	0.6-2	0.04-0.05	0.0-2.9	0.5-1.0	.05	.37			
267:														
Solirec	0-4	---	---	10-16	1.35-1.50	2-6	0.13-0.15	0.0-2.9	0.5-1.0	.28	.28	3	3	86
	4-12	---	---	20-27	1.25-1.40	0.6-2	0.14-0.18	0.0-2.9	0.0-1.0	.20	.20			
	12-19	---	---	18-27	1.25-1.40	0.6-2	0.14-0.18	0.0-2.9	0.0-0.5	.43	.43			
	19-75	---	---	28-32	1.25-1.40	0.6-2	0.17-0.21	0.0-2.9	0.0-0.5	.28	.28			
Abracon	0-2	---	---	15-25	1.25-1.40	0.6-2	0.14-0.17	0.0-2.9	1.0-2.0	.37	.37	5	4L	86
	2-16	---	---	18-27	1.25-1.40	0.6-2	0.14-0.17	0.0-2.9	1.0-2.0	.37	.37			
	16-51	---	---	18-35	1.30-1.45	0.6-2	0.14-0.18	0.0-2.9	0.5-2.0	.37	.43			
	51-60	---	---	18-27	1.30-1.45	0.6-2	0.14-0.17	0.0-2.9	0.0-0.5	.32	.43			
Begay	0-4	---	---	2-8	1.25-1.35	2-6	0.10-0.13	0.0-2.9	0.5-1.0	.20	.20	5	3	86
	4-12	---	---	9-13	1.25-1.40	2-6	0.10-0.13	0.0-2.9	0.5-1.0	.24	.24			
	12-37	---	---	10-15	1.25-1.40	2-6	0.10-0.13	0.0-2.9	0.0-0.5	.24	.24			
	37-60	---	---	10-15	1.25-1.40	2-6	0.10-0.13	0.0-2.9	0.0-0.5	.24	.24			
268:														
Toliver	0-7	---	---	5-18	1.35-1.50	2-6	0.03-0.04	0.0-2.9	2.0-4.0	.02	.20	3	8	0
	7-19	---	---	5-18	1.35-1.50	2-6	0.10-0.11	0.0-2.9	1.0-2.0	.15	.24			
	19-59	---	---	5-18	1.35-1.50	2-6	0.07-0.08	0.0-2.9	0.0-0.5	.10	.32			
	59-63	---	---	---	---	0.06-0.2	---	---	---	---	---			
Rock outcrop	0-60	---	---	---	---	---	0.00-0.00	---	---	---	---	-	8	0

Table 21.--Physical properties of the soils--Continued

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Permeability (Ksat)	Available water capacity	Linear extensibility	Organic matter	Erosion factors			Wind erodibility group	Wind erodibility index
										Kw	Kf	T		
	In.	Pct.	Pct.	Pct.	g/cc	In./hr.	In./in.	Pct.	Pct.					
269:														
Walknolls	0-2	---	---	8-18	1.35-1.50	2-6	0.03-0.04	0.0-2.9	1.0-2.0	.05	.24	1	8	0
	2-7	---	---	10-18	1.35-1.50	2-6	0.03-0.04	0.0-2.9	1.0-2.0	.15	.24			
	7-14	---	---	10-18	1.35-1.50	2-6	0.03-0.04	0.0-2.9	1.0-2.0	.05	.24			
	14-18	---	---	---	---	0.2-2	---	---	---	---	---			
Badland	0-2	---	---	40-60	1.15-1.30	0.0015-0.2	0.00-0.12	6.0-8.9	0.0-0.0	.10	.20	1	4	86
	2-12	---	---	---	---	0.0001-0.2	---	---	---	---	---			
Rock outcrop	0-60	---	---	---	---	---	0.00-0.00	---	---	---	---	-	8	0
270:														
Walknolls	0-3	---	---	10-15	1.25-1.40	2-6	0.07-0.09	0.0-2.9	1.0-3.0	.10	.28	1	6	48
	3-7	---	---	14-25	1.25-1.40	0.6-2	0.07-0.09	0.0-2.9	1.0-3.0	.10	.28			
	7-16	---	---	14-20	1.35-1.50	2-6	0.03-0.04	0.0-2.9	1.0-2.0	.05	.24			
	16-20	---	---	---	---	0.2-2	---	---	---	---	---			
Gilston	0-4	---	---	5-18	1.35-1.50	2-6	0.09-0.12	0.0-2.9	0.5-1.0	.28	.28	5	3	86
	4-52	---	---	5-18	1.35-1.50	2-6	0.07-0.10	0.0-2.9	0.5-1.0	.15	.28			
	52-68	---	---	10-18	1.25-1.40	2-6	0.13-0.16	0.0-2.9	0.0-0.5	.43	.43			
271:														
Water	---	---	---	---	---	---	---	---	---	---	---	-	---	---

Table 22.--Chemical properties of the soils

(Absence of an entry indicates that data were not estimated.)

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
1:							
Abor	0-4	25-35	7.4-8.4	0-2	0	0	0
	4-37	40-50	7.9-8.4	2-4	0	0.0-2.0	0
	37-41	---	---	---	---	---	---
2:							
Abor	0-4	25-35	7.4-8.4	0-2	0	0	0
	4-37	40-50	7.9-8.4	2-4	0	0.0-2.0	0
	37-41	---	---	---	---	---	---
3:							
Adderton	0-22	15-25	6.1-7.8	0	0	0	0
	22-39	10-20	6.6-7.8	0	0	0	0
	39-60	10-15	6.6-7.8	0	0	0	0
4:							
Almy	0-6	10-20	7.4-8.4	0	0	0	0
	6-30	10-20	7.4-8.4	0-3	0	0	0
	30-60	10-15	7.9-9.0	5-15	0	0.0-2.0	0-2
5:							
Apmay	0-17	20-25	6.6-7.8	0	0	0	0
	17-30	10-15	6.6-7.8	0	0	0	0
	30-60	0.0-5.0	6.6-7.8	0	0	0	0
6:							
Avalon	0-3	5.0-10	7.4-8.4	1-2	0	0	0
	3-12	10-15	7.9-9.0	15-30	0	2.0-4.0	1-3
	12-60	10-15	7.9-9.0	10-25	0	2.0-4.0	1-3
Mack	0-4	10-15	7.4-7.8	0	0	0	0
	4-13	15-20	7.4-7.8	0-5	0	0	0
	13-42	10-15	7.9-9.0	15-40	0	2.0-4.0	0-3
	42-60	10-15	7.9-9.0	10-20	0	0.0-2.0	0-3
7:							
Avalon	0-3	15-25	7.9-8.4	1-2	0-1	0.0-2.0	0-1
	3-36	15-25	7.9-8.4	15-30	0-1	0.0-2.0	0-1
	36-43	15-25	8.5-9.0	10-20	0-1	0.0-4.0	0-1
	43-47	---	---	---	---	---	---
Persayo, moist	0-2	10-20	7.4-8.4	5-15	1-10	2.0-4.0	0-3
	2-10	10-20	7.4-8.4	5-15	10-15	2.0-4.0	0-5
	10-14	---	---	---	---	---	---
Degater	0-1	30-40	7.4-8.4	2-5	0	0	0
	1-20	30-40	7.9-9.0	5-15	0	0.0-2.0	1-5
	20-38	25-40	7.9-9.0	5-15	0-2	2.0-4.0	1-5
	38-42	---	---	---	---	---	---
8:							
Badland	0-2	---	7.9-11.0	5-15	1-10	4.0-20.0	5-30
	2-12	---	---	---	---	---	---
9:							
Baroid	0-3	1.0-5.0	7.9-9.0	3-10	0	2.0-8.0	3-10
	3-47	1.0-5.0	7.9-9.0	3-10	0	4.0-8.0	3-10
	47-60	---	7.9-9.0	3-10	0	4.0-8.0	3-10

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
9:							
Eghelm	0-4	5.0-10	7.9-9.0	3-10	0	0.0-4.0	5-10
	4-21	5.0-10	8.5-9.6	3-10	0	4.0-8.0	10-20
	21-60	5.0-10	8.5-9.6	3-10	0	4.0-8.0	10-20
10:							
Battlement	0-3	5.0-15	7.4-8.4	2-5	0	0	0
	3-60	15-20	7.9-9.0	3-10	0	0.0-4.0	0
11:							
Battlement, saline	0-4	15-20	7.9-8.4	1-2	0-1	0.0-2.0	0-1
	4-17	15-20	7.9-8.4	1-2	1-3	2.0-8.0	1-5
	17-30	15-20	7.9-8.4	2-4	3-5	8.0-16.0	3-5
	30-60	10-20	7.9-9.0	2-4	1-3	4.0-8.0	3-8
12:							
Berlake	0-10	5.0-10	7.4-7.8	0	0	0	0-1
	10-23	10-20	6.6-7.8	0	0	0	0-1
	23-31	5.0-10	6.6-7.8	0	0	0	0-1
	31-60	5.0-10	6.6-7.8	0	0	0	0-1
13:							
Berlake	0-10	5.0-10	7.4-7.8	0	0	0	0-1
	10-23	10-20	6.6-7.8	0	0	0	0-1
	23-31	5.0-10	6.6-7.8	0	0	0	0-1
	31-60	5.0-10	6.6-7.8	0	0	0	0-1
14:							
Berlake	0-10	5.0-10	7.4-7.8	0	0	0	0-1
	10-25	10-20	6.6-7.8	0	0	0	0-1
	25-33	5.0-10	6.6-7.8	0	0	0	0-1
	33-60	5.0-10	6.6-7.8	0	0	0	0-1
Maysprings	0-6	5.0-10	6.6-7.8	0	0	0	0
	6-22	10-20	6.6-7.8	0	0	0	0
	22-29	5.0-10	6.6-7.8	0	0	0	0
	29-60	2.0-10	7.4-8.4	0-2	0	0	0
15:							
Berlake	0-14	10-15	6.6-7.3	0	0	0	0
	14-57	10-15	6.6-7.8	0	0	0	0
	57-60	5.0-10	6.6-7.8	0-5	0	0	0
Taffom	0-7	5.0-10	6.6-7.8	0	0	0	0
	7-41	10-20	6.6-7.8	0	0	0	0
	41-60	2.0-15	7.4-8.4	1-5	0	0	0
Gretdivid	0-3	5.0-10	6.6-7.8	0	0	0	0
	3-7	7.0-15	6.6-7.8	0	0	0	0
	7-60	2.0-5.0	6.6-7.8	0-5	0	0	0
16:							
Bilhil	0-12	30-40	6.6-7.8	0-2	0	0	0
	12-23	25-35	7.4-8.4	2-5	0	0.0-2.0	0
	23-60	25-35	7.9-8.4	3-10	0	0.0-2.0	0
17:							
Binco	0-2	30-45	6.6-7.3	0	0	0	0
	2-9	20-30	7.4-7.8	0-2	0	0	0
	9-60	30-60	7.9-8.4	1-10	0-5	0	0

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
18:							
Boltus	0-3	20-40	8.5-9.0	3-5	1-5	0.0-4.0	3-5
	3-17	20-40	7.9-9.0	3-5	5-15	4.0-8.0	3-5
	17-21	---	---	---	---	---	---
Beamton	0-2	20-40	7.9-8.4	3-5	0-1	0.0-2.0	1-3
	2-26	20-40	7.9-9.0	3-5	3-5	2.0-4.0	3-5
	26-33	20-40	7.9-9.0	3-5	5-10	4.0-8.0	3-5
	33-37	---	---	---	---	---	---
19:							
Borollic Natrargids	0-5	5.0-15	6.6-8.4	0-1	0	2.0-4.0	5-15
	5-45	20-35	7.9-9.0	0-1	0-3	4.0-16.0	15-25
	45-60	20-35	8.5-11.0	1-5	1-3	4.0-16.0	10-25
Borollic Haplargids	0-2	5.0-20	6.6-7.8	0-1	0	0	0
	2-30	10-25	6.6-7.8	0-1	0	0	0
	30-60	5.0-20	7.4-8.4	1-4	0	0	0
Ustic Torrifluvents	0-4	4.0-20	6.6-7.3	0-3	0	0	0
	4-60	5.0-15	7.4-8.4	0-5	0	0	0
20:							
Brownsto	0-3	5.0-15	7.9-8.4	1-5	0	0.0-2.0	0
	3-14	5.0-20	7.9-8.4	1-10	0	0.0-2.0	0
	14-29	5.0-15	8.5-9.0	15-40	0	0.0-2.0	0-1
	29-60	5.0-15	7.9-8.4	5-35	0	2.0-4.0	0-1
Castee	0-2	5.0-15	7.9-8.4	0-10	0	0	0
	2-32	5.0-10	7.9-8.4	25-55	0	0.0-2.0	0
	32-53	5.0-10	7.9-8.4	25-55	0	0.0-2.0	0
	53-60	5.0-10	7.9-8.4	20-50	0	2.0-4.0	0-5
21:							
Bulkley	0-2	10-15	6.6-7.3	0-5	0	0	0
	2-33	25-35	6.6-7.8	0-5	0	0	0
	33-60	20-30	7.9-8.4	5-10	0	0	0
22:							
Bulkley	0-4	25-35	7.4-8.4	0-2	0	0	0
	4-36	35-45	7.4-8.4	1-5	0	0	0
	36-60	35-45	7.9-8.4	3-10	0-1	0.0-2.0	0
23:							
Bulkley	0-4	25-35	6.6-8.4	0-2	0	0	0
	4-36	35-45	6.6-8.4	1-5	0	0	0
	36-60	35-45	7.9-8.4	3-10	0-1	0.0-2.0	0
24:							
Bulkley	0-3	20-30	7.4-8.4	0-2	0	0	0
	3-41	35-45	7.4-8.4	1-5	0	0	0
	41-60	35-45	7.9-8.4	3-10	0-1	0.0-2.0	0
Quilt	0-7	10-20	7.4-7.8	0	0	0	0
	7-38	10-20	6.6-7.8	0	0	0	0
	38-48	15-30	7.4-7.8	0	0	0	0
	48-60	15-35	7.9-8.4	0-10	0	0	0

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
25:							
Campspass	0-2	10-15	6.6-7.8	0	0	0	0
	2-8	5.0-15	6.6-7.8	0	0	0	0
	8-20	25-35	7.4-7.8	0	0	0	0
	20-60	10-20	7.9-8.4	5-15	0	0.0-2.0	0
26:							
Campspass	0-2	10-15	6.6-7.8	0	0	0	0
	2-8	5.0-15	6.6-7.8	0	0	0	0
	8-20	25-35	7.4-7.8	0	0	0	0
	20-60	10-20	7.9-8.4	5-15	0	0.0-2.0	0
27:							
Canlodore	0-1	---	5.1-6.5	---	---	---	---
	1-7	5.0-10	5.6-6.0	0	0	0	0
	7-40	5.0-10	5.6-6.5	0	0	0	0
	40-60	5.0-10	5.6-6.5	0	0	0	0
28:							
Carbol	0-2	5.0-15	6.1-7.3	0	0	0	0
	2-14	5.0-20	6.1-7.3	0	0	0	0
	14-18	---	---	---	---	---	---
Irigul	0-6	10-20	6.6-7.8	0	0	0.0-2.0	0
	6-15	10-20	6.6-7.8	0	0	0.0-2.0	0
	15-19	---	---	---	---	---	---
Rock outcrop	0-60	---	---	---	---	0	---
29:							
Carbol	0-2	5.0-15	6.1-7.3	0	0	0	0
	2-14	5.0-20	6.1-7.3	0	0	0	0
	14-18	---	---	---	---	---	---
Miracle	0-8	10-20	6.6-7.8	0-1	0	0	0
	8-37	10-20	6.6-7.8	0-1	0	0	0
	37-41	---	---	---	---	---	---
30:							
Carmody	0-3	5.0-10	7.4-7.8	0-5	0	0.0-2.0	0
	3-23	5.0-10	7.9-8.4	5-10	0	0.0-2.0	0
	23-27	---	---	---	---	---	---
Rock River	0-3	10-15	6.6-7.8	0	0	0	0
	3-22	10-15	6.6-7.8	0	0	0	0
	22-32	10-15	7.9-8.4	5-15	0	0.0-2.0	0
	32-60	5.0-10	7.9-8.4	5-15	0	0.0-2.0	0
Crestman	0-2	3.0-10	7.4-8.4	5-10	0	0	0
	2-14	1.0-5.0	7.9-8.4	5-10	0	0	0
	14-18	---	---	---	---	---	---
31:							
Castee	0-2	5.0-15	7.4-8.4	0-10	0	0	0
	2-32	5.0-10	7.9-8.4	20-50	0	0.0-2.0	0
	32-53	5.0-10	7.9-8.4	20-50	0	0.0-2.0	0
	53-60	5.0-10	7.9-8.4	20-50	0	2.0-4.0	0-5
32:							
Chroder	0-3	4.0-10	7.4-8.4	0-10	0	0	0
	3-10	4.0-10	7.9-8.4	5-10	0	0	0
	10-60	4.0-10	7.9-9.0	15-30	0	0.0-2.0	0

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
33:							
Clayburn, warm-------	0-11	15-20	6.6-7.8	0	0	0	0
	11-46	15-20	6.1-7.3	0	0	0	0
	46-60	10-15	6.1-7.8	0	0	0	0
34:							
Clayburn----------	0-17	10-15	6.1-7.3	0	0	0	0
	17-31	15-20	6.1-7.3	0	0	0	0
	31-60	10-15	6.1-7.3	0	0	0	0
Foidel----------	0-13	10-15	6.1-7.3	0	0	0	0
	13-33	10-15	5.6-6.5	0	0	0	0
	33-60	10-20	5.6-6.5	0	0	0	0
35:							
Clayburn----------	0-17	15-20	6.1-7.3	0	0	0	0
	17-50	15-20	6.1-7.3	0	0	0	0
	50-60	10-15	6.1-7.8	0	0	0	0
Youga, moist---------	0-1	---	5.1-6.5	---	---	---	---
	1-14	15-20	6.1-6.5	0	0	0	0
	14-40	15-20	6.1-7.3	0	0	0	0
	40-60	10-20	6.1-7.8	0	0	0	0
36:							
Clifsand----------	0-2	5.0-10	7.9-8.4	0-5	0	0	0
	2-13	5.0-10	7.9-8.4	10-20	0	0.0-2.0	0
	13-43	5.0-10	7.9-9.0	15-35	0	0.0-2.0	0-5
	43-60	3.0-5.0	7.9-9.0	10-30	0	0.0-2.0	0-5
Chroder----------	0-3	4.0-10	7.4-8.4	0-10	0	0	0
	3-10	4.0-10	7.9-8.4	5-10	0	0	0
	10-43	4.0-10	7.9-9.0	15-30	0	0.0-2.0	0
	43-65	4.0-10	7.9-9.0	5-15	0	0.0-2.0	0
37:							
Cochetopa----------	0-11	15-20	6.6-7.3	0	0	0	0
	11-19	15-25	6.6-7.3	0	0	0	0
	19-48	25-35	6.6-7.3	0	0	0	0
	48-60	25-35	6.6-7.3	0	0	0	0
38:							
Cochetopa----------	0-19	15-20	6.6-7.3	0	0	0	0
	19-48	25-35	6.6-7.3	0	0	0	0
	48-60	25-35	6.6-7.3	0	0	0	0
39:							
Cochetopa, warm------	0-11	15-20	6.6-7.3	0	0	0	0
	11-19	15-25	6.6-7.3	0	0	0	0
	19-48	25-35	6.1-7.3	0	0	0	0
	48-60	25-35	6.1-7.3	0	0	0	0
40:							
Cochetopa----------	0-19	15-20	6.6-7.3	0	0	0	0
	19-48	25-35	6.6-7.3	0	0	0	0
	48-60	25-35	6.6-7.3	0	0	0	0
Gothic----------	0-12	15-20	6.6-7.3	0	0	0	0
	12-17	25-35	6.6-7.3	0	0	0	0
	17-42	30-40	6.1-7.3	0	0	0	0
	42-60	30-40	6.6-7.3	0-1	0	0	0

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
41:							
Cochetopa	0-21	15-20	6.6-7.3	0	0	0	0
	21-51	25-35	6.6-7.3	0	0	0	0
	51-60	25-35	6.6-7.3	0	0	0	0
Gothic	0-12	15-20	6.1-7.3	0	0	0	0
	12-17	25-35	6.1-7.3	0	0	0	0
	17-42	30-40	6.1-7.3	0	0	0	0
	42-60	30-40	6.6-8.4	0-1	0	0	0
42:							
Cochetopa	0-19	15-20	6.6-7.3	0	0	0	0
	19-48	25-35	6.6-7.3	0	0	0	0
	48-60	25-35	6.6-7.3	0	0	0	0
Jerry	0-10	15-25	6.6-7.3	0	0	0	0
	10-31	30-40	6.6-7.3	0	0	0	0
	31-60	30-40	7.9-8.4	1-2	0	0.0-2.0	0
43:							
Coldspring, moist	0-14	10-15	6.6-7.8	0	0	0	0
	14-34	15-20	6.6-7.8	0	0	0	0
	34-47	10-15	6.6-7.8	0	0	0	0
	47-51	---	---	---	---	---	---
44:							
Cowestglen	0-5	3.0-10	7.9-8.4	1-5	0	0.0-2.0	1-8
	5-42	3.0-15	7.9-9.0	3-10	0	2.0-4.0	1-8
	42-60	2.0-10	7.9-9.0	3-10	0	2.0-4.0	1-8
45:							
Coyet	0-6	5.0-10	7.4-8.4	0-5	0	0	0
	6-22	3.0-10	7.4-8.4	5-10	0	0	0
	22-60	3.0-10	7.9-9.0	5-10	0	0.0-2.0	0-3
46:							
Coyet	0-6	5.0-10	7.4-8.4	0-5	0	0	0
	6-22	3.0-10	7.4-8.4	5-10	0	0	0
	22-60	3.0-10	7.9-9.0	5-10	0	0.0-2.0	0-3
47:							
Coyet	0-3	3.0-10	7.4-8.4	0	0	0	0
	3-15	2.0-5.0	7.4-8.4	0	0	0	0
	15-48	2.0-5.0	7.4-9.0	1-5	0	0.0-2.0	0
	48-52	---	---	---	---	---	---
Crestman, moist	0-2	3.0-10	7.4-7.8	5-10	0	0	0
	2-14	1.0-5.0	7.9-8.4	5-10	0	0	0
	14-18	---	---	---	---	---	---
48:							
Crago	0-2	10-20	7.9-8.4	10-15	0	0.0-2.0	0
	2-57	10-20	7.9-9.0	30-60	0	2.0-4.0	0
	57-60	10-20	7.9-9.0	15-25	0	2.0-4.0	0
Pensore	0-2	10-20	7.9-8.4	1-15	0	0.0-2.0	0
	2-7	10-20	7.9-8.4	1-15	0	0.0-2.0	0
	7-17	5.0-15	7.9-8.4	40-60	0	0.0-2.0	0
	17-21	---	---	---	---	---	---

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
48:							
Grapit	0-3	10-20	7.9-8.4	5-15	0	0.0-2.0	0
	3-38	10-15	7.9-9.0	10-65	0	0.0-2.0	0
	38-60	5.0-15	7.9-9.0	30-45	0	0.0-2.0	0
49:							
Cryoborolls, slumped	0-7	10-25	6.1-7.3	0	0	0	0
	7-35	10-30	5.6-7.3	0	0	0	0
	35-60	10-30	5.6-7.3	0	0	0	0
50:							
Cushool	0-5	5.0-15	7.4-7.8	0	0	0	0
	5-14	10-20	7.4-7.8	0	0	2.0-4.0	0-5
	14-25	5.0-15	7.4-8.4	4-15	0	2.0-4.0	0-5
	25-29	---	---	---	---	---	---
51:							
Cushool	0-5	5.0-15	7.4-7.8	0	0	0	0
	5-14	10-20	7.9-9.0	0	0	2.0-4.0	0-5
	14-25	5.0-15	7.9-9.0	4-15	0	2.0-4.0	0-5
	25-29	---	---	---	---	---	---
52:							
Danavore	0-4	10-15	6.6-7.3	0	0	0	0
	4-8	5.0-10	6.6-7.3	0	0	0	0
	8-22	10-20	6.6-8.4	0-3	0	0	0
	22-26	---	---	---	---	---	---
Waybe	0-4	15-30	7.9-8.4	1-5	0	0.0-2.0	0
	4-15	15-30	7.9-8.4	1-5	0	0.0-4.0	0
	15-19	---	---	---	---	---	---
53:							
Davtone	0-6	10-20	6.6-7.3	0	0	0	0
	6-17	10-20	6.6-7.3	0	0	0	0
	17-30	15-25	6.6-7.3	0	0	0	0
	30-60	10-20	7.4-7.8	0	0	0	0
Forsey	0-8	10-15	6.6-7.3	0	0	0	0
	8-24	10-15	6.6-7.3	0	0	0	0
	24-60	5.0-10	7.9-8.4	2-5	0	0	0
54:							
Deaver	0-2	15-25	7.9-8.4	0-10	0	0.0-4.0	1-5
	2-30	25-35	7.9-8.4	5-15	5-10	0.0-4.0	3-10
	30-34	---	---	---	---	---	---
Avalon	0-3	10-15	7.4-8.4	1-2	0	0	0
	3-12	10-15	7.9-9.0	15-30	0	2.0-4.0	1-3
	12-60	10-15	7.9-9.0	10-40	0	2.0-4.0	1-3
55:							
Deaver	0-2	15-25	7.9-8.4	0-10	0	0.0-4.0	1-5
	2-35	25-35	7.9-9.0	5-15	5-10	0.0-4.0	3-10
	35-39	---	---	---	---	---	---
Chipeta	0-1	25-35	7.9-9.0	5-15	1-5	2.0-4.0	5-10
	1-17	25-35	7.9-9.0	5-15	5-10	4.0-8.0	5-10
	17-21	---	---	---	---	---	---

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
56:							
Debone	0-3	10-25	8.5-9.0	5-10	0	0.0-2.0	10-20
	3-14	20-35	9.1-9.6	5-10	0	0.0-4.0	15-30
	14-35	10-20	9.1-9.6	10-15	0-3	4.0-16.0	10-30
	35-60	5.0-10	8.5-9.0	10-15	0-3	4.0-8.0	10-20
57:							
Detra	0-19	10-20	6.6-7.3	0	0	0	0
	19-50	10-20	6.6-7.3	0	0	0	0
	50-60	5.0-15	7.4-8.4	5-10	0	0	0
Cortyzack	0-9	10-20	6.6-7.8	0	0	0	0
	9-24	15-20	6.6-7.8	0-3	0	0	0
	24-45	5.0-15	7.9-8.4	15-30	0	0.0-2.0	0
	45-60	5.0-15	7.9-8.4	10-20	0	0.0-2.0	0
58:							
Diaflats	0-2	10-15	7.9-8.4	5-15	0	0	0
	2-26	10-15	7.9-9.0	5-15	0	0	0
	26-30	---	---	---	---	---	---
Fondillas	0-5	5.0-15	7.9-8.4	2-5	0-1	0.0-2.0	0-1
	5-11	10-20	7.9-8.4	4-10	0-1	0.0-2.0	1-3
	11-15	---	---	---	---	---	---
59:							
Dranyon	0-2	---	5.1-6.5	---	---	---	---
	2-19	15-25	6.1-6.5	0	0	0	0
	19-34	10-20	5.6-7.3	0	0	0	0
	34-60	10-20	5.6-7.3	0	0	0	0
60:							
Dumps, mine	0-60	---	---	---	---	0	---
61:							
Ecklund	0-3	5.0-10	7.9-9.0	1-2	0	0.0-2.0	0-1
	3-24	5.0-10	7.9-9.0	1-2	0	0.0-2.0	0-1
	24-36	5.0-10	7.9-9.0	1-2	0	0.0-2.0	0-1
	36-40	---	---	---	---	---	---
Tipperary	0-3	2.0-12	7.9-8.4	0-5	0	0.0-2.0	0
	3-60	0.0-6.0	7.9-9.0	0-5	0	0.0-2.0	0
62:							
Eghelm	0-3	5.0-10	7.9-9.0	1-3	0	0.0-4.0	0-1
	3-52	5.0-10	7.9-9.0	1-3	0	0.0-4.0	1-3
	52-60	5.0-10	7.9-9.0	1-3	0	0.0-4.0	1-5
63:							
Eghelm, moist	0-6	5.0-10	7.4-8.4	1-3	0	0.0-4.0	0-1
	6-60	5.0-10	7.9-9.0	1-3	0	0.0-4.0	1-3
64:							
Emlin	0-11	10-15	6.6-7.8	0-1	0	0	0
	11-19	10-20	7.4-8.4	0-1	0	0	0
	19-60	10-20	7.9-9.0	15-40	0	0.0-4.0	0-1
65:							
Emlin	0-7	10-15	6.6-7.8	0-1	0	0	0
	7-30	10-20	7.9-8.4	0-1	0	0	0
	30-60	10-20	7.9-9.0	15-40	0	0.0-4.0	0-1

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
65:							
Tymosling	0-1	25-30	6.6-7.3	0	0	0	0
	1-5	15-30	6.6-7.3	0	0	0	0
	5-14	25-35	7.4-8.4	0	0	0	0
	14-35	30-40	7.9-8.4	3-10	0	0.0-2.0	0
	35-39	---	---	---	---	---	---
66:							
Evanot	0-8	10-20	6.6-7.8	0-1	0	0	0
	8-20	10-20	7.4-7.8	0-1	0	0	0
	20-33	10-20	7.9-8.4	5-15	0	0.0-2.0	0-5
	33-60	10-15	7.9-8.4	5-15	0	0.0-2.0	0-5
67:							
Evanot	0-8	10-20	6.6-7.8	0-1	0	0	0
	8-20	10-20	7.4-7.8	0-1	0	0	0
	20-33	10-20	7.9-8.4	5-15	0	0.0-2.0	0-5
	33-60	10-15	7.9-8.4	5-15	0	0.0-2.0	0-5
68:							
Evanot	0-3	10-20	6.6-7.8	0-1	0	0	0
	3-22	10-20	7.4-7.8	0-1	0	0	0
	22-60	10-15	7.9-8.4	5-15	0	0.0-2.0	0-5
Yamo	0-3	10-20	7.4-8.4	1-2	0	0	0
	3-14	10-20	7.4-8.4	1-2	0	0	0
	14-60	10-20	7.9-8.4	2-10	0	0.0-2.0	0-1
69:							
Fenster	0-2	10-15	7.9-9.0	5-15	0-1	0.0-2.0	0-1
	2-11	10-15	8.5-9.0	5-15	0-1	0.0-4.0	1-3
	11-60	10-15	7.9-8.4	5-15	0-1	0.0-4.0	1-3
Thenipel	0-2	10-15	7.9-8.4	5-15	0-1	0	0
	2-25	10-15	7.9-8.4	5-15	0-1	0.0-2.0	1-3
	25-60	10-15	7.9-8.4	5-15	0-1	0.0-2.0	1-3
70:							
Fluvaquents, frequently flooded	0-4	10-20	7.4-7.8	0-10	0	0	0
	4-60	5.0-25	7.4-8.4	0-10	0	0	0
Haplaquolls, frequently flooded	0-6	15-30	7.9-8.4	0-5	0	0	0
	6-14	15-30	7.9-8.4	0-5	0	0	0
	14-21	3.0-10	7.4-8.4	0-5	0	0	0
	21-34	10-20	7.4-8.4	0-5	0	0	0
	34-44	1.0-10	7.4-8.4	0-5	0	0	0
	44-60	1.0-10	7.4-8.4	0-5	0	0	0
71:							
Flygare, dry	0-1	---	5.1-6.5	---	---	---	---
	1-22	10-20	6.6-7.3	0	0	0	0
	22-29	10-20	6.6-7.3	0	0	0	0
	29-35	10-20	6.6-7.3	0	0	0	0
	35-60	10-20	6.6-7.3	0	0	0	0

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
72:							
Foidel, cool---------	0-2	---	5.1-6.5	---	---	---	---
	2-28	15-20	6.6-7.3	0	0	0	0
	28-39	15-20	6.6-7.3	0	0	0	0
	39-60	15-20	6.6-7.3	0	0	0	0
73:							
Foidel---------------	0-2	---	5.1-6.5	---	---	---	---
	2-28	15-20	6.1-7.3	0	0	0	0
	28-39	15-20	6.6-7.3	0	0	0	0
	39-60	15-20	6.6-7.3	0	0	0	0
74:							
Foidel, moist--------	0-2	---	5.1-6.5	---	---	---	---
	2-23	15-20	6.1-7.3	0	0	0	0
	23-38	15-20	6.6-7.3	0	0	0	0
	38-60	15-20	6.6-7.3	0	0	0	0
Flygare--------------	0-1	---	5.1-6.5	---	---	---	---
	1-22	10-20	6.6-7.3	0	0	0	0
	22-29	10-20	6.6-7.3	0	0	0	0
	29-35	10-20	6.6-7.3	0	0	0	0
	35-60	10-20	6.6-7.3	0	0	0	0
Skyway, moist--------	0-20	5.0-30	6.1-7.3	0-1	0	0	0
	20-31	4.0-10	6.1-7.8	0-1	0	0	0
	31-35	---	---	---	---	---	---
75:							
Fonce----------------	0-3	5.0-10	6.6-7.8	0	0	0	0
	3-15	5.0-15	6.6-7.8	0	0	0	0
	15-33	4.0-10	7.9-9.0	15-40	0	0.0-4.0	0
	33-60	1.0-5.0	7.4-9.0	---	0	0.0-2.0	0
76:							
Fonce----------------	0-2	3.0-5.0	7.4-7.8	0	0	0	0
	2-16	10-15	7.4-7.8	0	0	0	0
	16-30	4.0-10	7.9-8.4	15-40	0	0.0-2.0	0
	30-60	2.0-10	7.9-8.4	0-10	0	0.0-2.0	0
77:							
Forelle--------------	0-5	5.0-20	7.4-7.8	0	0	0	0
	5-23	10-20	7.4-7.8	0	0	0	0
	23-51	10-20	7.9-8.4	5-15	0	0.0-2.0	0-5
	51-60	2.0-10	7.9-8.4	1-5	0	0.0-2.0	0-5
78:							
Forelle--------------	0-5	5.0-20	6.6-8.4	0	0	0	0
	5-23	10-20	6.6-8.4	0	0	0	0
	23-51	10-20	7.9-9.0	5-15	0	0.0-2.0	0-5
	51-60	2.0-10	7.9-9.0	1-5	0	0.0-2.0	0-5
79:							
Forelle--------------	0-5	5.0-20	6.6-8.4	0	0	0	0
	5-23	10-20	6.6-8.4	0	0	0	0
	23-51	10-20	7.9-9.0	5-15	0	0.0-2.0	0-5
	51-60	2.0-10	7.9-9.0	1-5	0	0.0-2.0	0-5
Evanot---------------	0-8	10-20	6.6-7.8	0-1	0	0	0
	8-20	10-20	7.4-7.8	0-1	0	0	0
	20-33	10-20	7.9-8.4	5-15	0	0.0-2.0	0-5
	33-60	10-15	7.9-8.4	5-15	0	0.0-2.0	0-5

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
80:							
Forelle	0-5	5.0-20	6.6-8.4	0	0	0	0
	5-23	10-20	6.6-8.4	0	0	0	0
	23-51	10-20	7.9-9.0	5-15	0	0.0-2.0	0-5
	51-60	2.0-10	7.9-9.0	1-5	0	0.0-2.0	0-5
Evanot	0-8	10-20	6.6-7.8	0-1	0	0	0
	8-20	10-20	7.4-7.8	0-1	0	0	0
	20-33	10-20	7.9-8.4	5-15	0	0.0-2.0	0-5
	33-60	10-15	7.9-8.4	5-15	0	0.0-2.0	0-5
81:							
Forelle	0-6	5.0-20	6.6-8.4	0	0	0	0
	6-30	10-20	6.6-8.4	0	0	0	0
	30-60	10-20	7.9-9.0	5-15	0	0.0-2.0	0-5
Obadia	0-1	10-15	7.4-7.8	0	0	0.0-2.0	1-5
	1-13	25-35	7.4-9.0	0	0	0.0-4.0	10-20
	13-42	25-35	7.9-9.0	3-10	0	0.0-4.0	15-20
	42-60	15-25	7.9-9.0	5-10	1-3	0.0-4.0	5-10
82:							
Forelle	0-5	5.0-20	6.6-8.4	0	0	0	0
	5-19	10-20	6.6-8.4	0	0	0	0
	19-60	10-20	7.9-9.0	5-15	0	0.0-2.0	0-5
Pinelli	0-3	10-15	6.6-7.8	0	0	0	0
	3-19	25-35	7.4-7.8	0	0	0	0
	19-60	20-30	7.9-8.4	5-15	0	0.0-2.0	0
Maysprings	0-2	5.0-10	6.6-7.8	0	0	0	0
	2-14	10-20	6.6-7.8	0	0	0	0
	14-20	5.0-10	6.6-7.8	0	0	0	0
	20-60	2.0-10	7.4-8.4	0-2	0	0	0
83:							
Forsey	0-8	10-15	6.6-7.3	0	0	0	0
	8-24	10-15	6.6-7.3	0	0	0	0
	24-60	5.0-10	7.9-8.4	2-5	0	0	0
Libeg	0-5	10-15	6.6-7.3	0	0	0	0
	5-12	10-15	6.6-7.3	0	0	0	0
	12-35	10-15	6.1-7.3	0	0	0	0
	35-60	5.0-15	6.1-7.8	0	0	0	0
84:							
Gebson, moist	0-2	10-15	6.6-7.3	0	0	0	0
	2-7	10-15	6.6-7.3	0	0	0	0
	7-13	10-15	6.6-7.8	0	0	0	0
	13-24	10-15	7.9-8.4	5-15	0	0.0-2.0	0
	24-60	5.0-15	7.9-8.4	5-15	0	0.0-2.0	0
Youga	0-10	10-15	6.1-7.3	0	0	0	0
	10-16	10-15	6.1-7.3	0	0	0	0
	16-50	5.0-15	6.6-7.3	0	0	0	0
	50-60	5.0-15	6.6-8.4	0-5	0	0	0
85:							
Giarch	0-2	10-15	7.9-9.0	0-2	0	0.0-4.0	5-15
	2-18	25-35	8.5-9.6	0-2	0	16.0-32.0	30-200
	18-58	20-35	8.5-9.6	5-10	1-3	16.0-32.0	30-150
	58-60	5.0-10	8.5-9.6	5-10	1-3	8.0-16.0	5-20

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
86:							
Gracot	0-5	4.0-10	7.4-8.4	5-20	0	0.0-2.0	0
	5-16	2.0-5.0	7.4-8.4	5-15	0	0.0-2.0	0
	16-60	1.0-5.0	7.4-8.4	2-10	0	0.0-2.0	0
Maybell	0-3	5.0-10	6.6-7.3	0	0	0	0
	3-15	2.0-10	6.6-7.3	0	0	0	0
	15-60	1.0-5.0	6.6-7.8	0-2	0	0	0
87:							
Gretdivid	0-3	5.0-10	6.6-7.8	0	0	0	0
	3-7	7.0-15	6.6-7.8	0	0	0	0
	7-60	2.0-5.0	6.6-7.8	0-5	0	0	0
Taffom	0-6	5.0-10	6.6-7.8	0	0	0	0
	6-43	10-20	6.6-7.8	0	0	0	0
	43-60	2.0-15	7.4-8.4	1-5	0	0	0
Abor	0-6	30-40	7.4-8.4	0-2	0	0	0
	6-31	40-50	7.9-8.4	2-4	0	0.0-2.0	0
	31-35	---	---	---	---	---	---
88:							
Grieves	0-2	5.0-10	7.4-8.4	0-10	0	0	0
	2-30	5.0-10	7.4-8.4	5-10	0	0.0-2.0	0
	30-60	5.0-10	7.9-8.4	5-10	0	0.0-2.0	0
89:							
Grieves	0-2	5.0-10	7.4-8.4	0-10	0	0	0
	2-30	5.0-10	7.9-8.4	5-10	0	0.0-2.0	0
	30-60	5.0-10	7.9-8.4	5-10	0	0.0-2.0	0
90:							
Grieves	0-2	5.0-10	7.4-8.4	0-10	0	0	0
	2-30	5.0-10	7.9-8.4	5-10	0	0.0-2.0	0
	30-60	5.0-10	7.9-8.4	5-10	0	0.0-2.0	0
Crestman	0-2	3.0-10	7.4-8.4	5-10	0	0	0
	2-14	1.0-5.0	7.9-8.4	5-10	0	0	0
	14-18	---	---	---	---	---	---
91:							
Grieves	0-2	5.0-10	7.4-8.4	5-10	0	0	0
	2-60	5.0-10	7.9-8.4	5-10	0	0.0-2.0	0
Yamo	0-5	15-20	7.9-8.4	1-2	0	0	0
	5-60	10-20	7.9-8.4	2-10	0	0.0-2.0	0-1
Crestman	0-2	3.0-10	7.4-8.4	5-10	0	0	0
	2-14	1.0-5.0	7.9-8.4	5-10	0	0	0
	14-18	---	---	---	---	---	---
92:							
Grimm	0-4	5.0-15	7.9-8.4	1-3	0-1	0.0-2.0	0-1
	4-13	5.0-10	7.9-8.4	1-3	0-1	0.0-2.0	0-1
	13-18	5.0-10	7.9-8.4	1-3	0-1	0.0-2.0	0-1
	18-60	5.0-10	7.9-8.4	1-3	0-1	0.0-2.0	0-1
Ustic Torriorthents, shallow	0-7	5.0-15	7.9-8.4	0-5	0	0	0
	7-18	10-30	7.9-8.4	3-10	0	0.0-2.0	0
	18-22	---	---	---	---	---	---

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
93:							
Gullied land	0-60	---	---	---	---	0	---
94:							
Hapney, moist	0-2	5.0-15	7.4-7.8	0	0	0.0-2.0	0
	2-15	25-35	7.9-9.0	0	0	2.0-4.0	13-20
	15-50	15-20	8.5-9.6	5-10	1-5	8.0-16.0	20-30
	50-60	10-20	7.9-9.0	3-10	0-2	0.0-4.0	10-20
95:							
Haterton	0-2	10-15	7.9-9.0	5-15	0	2.0-4.0	3-10
	2-16	10-15	7.9-9.0	5-15	0-5	2.0-4.0	3-10
	16-20	---	---	---	---	---	---
Piezon	0-2	10-20	7.9-8.4	5-10	0	0	0
	2-13	10-15	7.9-8.4	15-25	0	0.0-2.0	0
	13-23	10-15	7.9-8.4	15-25	0	0.0-2.0	0
	23-27	---	---	---	---	---	---
96:							
Heathcoat	0-13	15-20	6.6-7.8	0	0	0	0
	13-29	20-30	6.6-7.8	0	0	0	0
	29-60	15-25	7.9-8.4	15-35	0	0.0-2.0	0
97:							
Heathcoat	0-6	15-20	6.6-7.8	0	0	0	0
	6-22	20-30	6.6-7.8	0	0	0	0
	22-60	20-30	7.9-8.4	5-35	0	0.0-2.0	0
Clayburn	0-15	15-20	6.1-7.3	0	0	0	0
	15-44	15-20	6.1-7.3	0	0	0	0
	44-60	10-15	6.1-7.8	0	0	0	0
98:							
Herm	0-10	15-20	6.1-7.3	0	0	0	0
	10-18	25-40	6.1-7.3	0	0	0	0
	18-45	30-40	6.1-7.3	0	0	0	0
	45-60	30-40	6.6-7.8	1-2	0	0.0-2.0	0
Fughes	0-19	15-20	6.6-7.3	0	0	0	0
	19-46	35-45	6.1-7.3	0	0	0	0
	46-60	35-45	7.9-8.4	1-5	0	0	0
99:							
Hesperus, dry	0-5	10-15	6.6-7.3	0	0	0	0
	5-20	15-20	6.6-7.3	0	0	0	0
	20-52	15-20	6.6-7.3	0	0	0	0
	52-60	15-20	6.6-7.8	0-10	0	0	0
100:							
Hesperus	0-12	10-15	6.6-7.3	0	0	0	0
	12-45	15-20	6.6-7.3	0	0	0	0
	45-60	15-20	7.4-8.4	0-10	0	0	0
101:							
Hesperus	0-12	10-15	6.6-7.3	0	0	0	0
	12-45	15-20	6.6-7.3	0	0	0	0
	45-60	15-20	7.4-8.4	0-10	0	0	0

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
102:							
Holter	0-10	10-15	6.6-7.8	0	0	0	0
	10-23	15-20	7.4-7.8	0	0	0	0
	23-60	10-15	7.9-8.4	2-4	0	0.0-2.0	0
Detra	0-15	10-25	6.6-7.8	0	0	0	0
	15-36	10-20	7.4-8.4	0	0	0	0
	36-60	10-15	7.9-8.4	2-10	0	0.0-2.0	0
103:							
Iles	0-5	15-20	6.6-7.3	0	0	0.0-2.0	0
	5-25	15-25	6.6-7.3	0	0	0.0-2.0	0
	25-36	15-20	7.9-8.4	15-30	0	0.0-2.0	0
	36-60	10-15	7.9-8.4	20-55	0	0.0-2.0	0
104:							
Ironco	0-10	10-20	6.6-7.3	0	0	0	0
	10-60	10-20	6.1-7.3	0	0	0	0
Mulgon, dry	0-1	---	5.1-6.5	---	---	---	---
	1-16	10-15	6.1-6.5	0	0	0	0
	16-32	10-20	5.6-6.5	0	0	0	0
	32-60	10-20	5.6-6.5	0	0	0	0
105:							
Ironsprings	0-14	5.0-10	6.6-7.3	0	0	0	0
	14-40	5.0-10	6.6-7.3	0	0	0	0
	40-60	2.0-5.0	6.6-7.8	0	0	0	0
106:							
Ironsprings	0-10	5.0-10	6.6-7.3	0	0	0	0
	10-36	5.0-10	6.6-7.3	0	0	0	0
	36-60	2.0-5.0	6.6-7.8	0	0	0	0
107:							
Ironsprings	0-14	5.0-10	6.6-7.3	0	0	0	0
	14-40	5.0-10	6.6-7.3	0	0	0	0
	40-60	2.0-5.0	6.6-7.8	0	0	0	0
Maysprings	0-3	5.0-10	6.6-7.8	0	0	0	0
	3-26	10-20	6.6-7.8	0	0	0	0
	26-36	5.0-10	6.6-7.8	0	0	0	0
	36-60	2.0-10	7.4-8.4	0-2	0	0	0
Gretdivid	0-3	5.0-10	6.6-7.8	0	0	0	0
	3-7	7.0-15	6.6-7.8	0	0	0	0
	7-60	2.0-5.0	6.6-7.8	0-5	0	0	0
108:							
Jerry	0-2	---	5.1-6.5	---	---	---	---
	2-12	15-20	6.6-7.3	0	0	0	0
	12-23	25-35	7.4-7.8	0	0	0	0
	23-29	30-40	7.9-8.4	1-3	0	0	0-1
	29-60	30-40	7.9-8.4	2-4	0	0.0-2.0	0-1
Cochetopa	0-19	15-20	6.6-7.3	0	0	0	0
	19-48	25-35	6.6-7.3	0	0	0	0
	48-60	25-35	6.6-7.3	0	0	0	0

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
109:							
Joebas	0-7	5.0-10	6.6-7.8	0	0	0	0
	7-13	10-15	6.6-7.8	0	0	0	0
	13-16	10-15	6.6-8.4	0-1	0	0	0
	16-20	---	---	---	---	---	---
Rock outcrop	0-60	---	---	---	---	0	---
110:							
Kemmerer	0-3	25-30	7.9-8.4	3-10	0	0.0-2.0	0-2
	3-22	30-40	7.9-8.4	5-15	1-5	0.0-2.0	0-2
	22-26	---	---	---	---	---	---
111:							
Kemmerer	0-8	10-25	7.9-8.4	3-10	0	0.0-2.0	0-2
	8-27	30-40	7.9-8.4	5-15	1-5	0.0-2.0	0-2
	27-31	---	---	---	---	---	---
Grapit	0-3	10-15	7.9-8.4	5-15	0	0.0-2.0	0
	3-35	10-15	7.9-8.4	40-50	0	0.0-2.0	0
	35-60	5.0-15	7.9-8.4	30-45	0	0.0-2.0	0
112:							
Kemmerer	0-3	25-30	7.9-8.4	3-10	0	0.0-2.0	0-2
	3-22	30-40	7.9-8.4	5-15	1-5	0.0-2.0	0-2
	22-26	---	---	---	---	---	---
Moyerson	0-1	25-35	7.9-9.0	2-4	0-1	0.0-2.0	0-1
	1-17	30-50	7.9-9.0	2-4	3-5	2.0-8.0	1-3
	17-21	---	---	---	---	---	---
113:							
Kemmerer	0-3	25-30	7.4-7.8	3-10	0	0.0-2.0	0-2
	3-22	30-40	7.9-8.4	5-15	1-5	0.0-2.0	0-2
	22-26	---	---	---	---	---	---
Yamo	0-5	10-20	7.9-8.4	1-2	0	0	0
	5-15	10-20	7.9-8.4	1-2	0	0	0
	15-38	10-20	7.9-8.4	2-10	0	0.0-2.0	0-1
	38-60	10-20	7.9-8.4	2-10	0	0.0-2.0	0-1
114:							
Lamphier	0-2	---	5.1-6.5	---	---	---	---
	2-24	10-20	6.6-7.3	0	0	0	0
	24-60	10-15	6.6-7.3	0	0	0	0
115:							
Lamphier	0-2	---	5.1-6.5	---	---	---	---
	2-24	10-20	6.6-7.3	0	0	0	0
	24-60	10-15	6.6-7.3	0	0	0	0
116:							
Lamphier	0-2	---	5.1-6.5	---	---	---	---
	2-24	10-20	6.6-7.3	0	0	0	0
	24-60	10-15	6.6-7.3	0	0	0	0
Jerry	0-10	15-20	6.6-7.3	0	0	0	0
	10-21	25-35	6.6-7.8	0	0	0	0
	21-27	30-40	6.6-8.4	0-2	0	0	0-1
	27-60	30-40	7.9-8.4	2-4	0	0.0-2.0	0-1

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
117:							
Lamphier	0-2	---	5.1-6.5	---	---	---	---
	2-24	10-20	6.6-7.3	0	0	0	0
	24-60	10-15	6.6-7.3	0	0	0	0
Jerry	0-10	15-20	6.6-7.3	0	0	0	0
	10-21	25-35	6.6-7.8	0	0	0	0
	21-27	30-40	6.6-8.4	0-2	0	0	0-1
	27-60	30-40	7.9-8.4	2-4	0	0.0-2.0	0-1
118:							
Lander	0-10	15-20	6.6-7.3	0	0	0	0
	10-44	10-20	7.4-8.4	1-5	0	0	0
	44-55	1.0-5.0	7.4-8.4	0-5	0	0	0
	55-60	1.0-5.0	7.4-8.4	0-5	0	0	0
119:							
Langspring	0-3	10-15	7.9-8.4	5-10	0	0	0
	3-17	10-15	7.9-9.0	15-40	0	0.0-2.0	2-5
	17-60	10-15	7.9-9.0	10-40	0-2	0.0-4.0	0-3
120:							
Layoint	0-14	5.0-10	6.6-7.8	0	0	0	0
	14-32	3.0-10	6.6-7.8	0	0	0	0
	32-36	---	---	---	---	---	---
Moosed	0-7	3.0-10	6.6-7.3	0	0	0	0
	7-15	1.0-5.0	7.4-7.8	0	0	0	0
	15-18	1.0-5.0	7.4-7.8	0	0	0	0
	18-22	---	---	---	---	---	---
Berlake	0-8	10-15	6.6-7.3	0	0	0	0
	8-42	10-15	6.6-7.8	0	0	0	0
	42-60	5.0-10	6.6-8.4	0-5	0	0	0
121:							
Leaps	0-1	---	5.1-6.5	---	---	---	---
	1-15	15-30	6.1-7.3	0	0	0	0
	15-39	15-30	5.6-7.3	0	0	0	0
	39-60	15-30	5.6-7.3	0	0	0	0
122:							
Leswill	0-5	15-30	7.4-9.0	2-5	0-1	0.0-4.0	4-8
	5-14	15-30	7.9-9.0	2-5	0-1	0.0-4.0	4-8
	14-41	15-30	7.9-9.0	2-5	10-15	8.0-16.0	15-35
	41-75	15-30	7.9-9.0	2-5	3-10	8.0-16.0	15-35
Rogrube	0-3	10-20	7.9-9.0	5-10	0-1	0.0-4.0	2-5
	3-28	15-20	7.9-9.0	15-35	1-2	4.0-8.0	3-8
	28-60	15-20	7.4-8.4	5-20	10-15	4.0-8.0	3-8
123:							
Lilsnake	0-4	10-20	7.9-8.4	10-15	0	0	0
	4-15	10-15	7.9-8.4	30-50	0	0.0-2.0	0
	15-19	10-15	7.9-8.4	10-40	0	0	0
	19-23	---	---	---	---	---	---
Sandwash	0-4	5.0-15	7.9-8.4	5-10	0	0	0
	4-16	5.0-15	7.9-8.4	30-50	0	0	0-1
	16-35	10-20	7.9-9.0	40-70	0	0.0-2.0	1-2
	35-39	---	---	---	---	---	---

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
124:							
Losee	0-5	5.0-10	7.4-7.8	0	0	0	0
	5-24	10-15	7.4-7.8	0	0	0	0
	24-40	10-15	7.4-7.8	5-15	0	0	0
	40-60	5.0-10	7.9-8.4	5-15	0	0	0
Thornburgh, dry	0-14	5.0-10	6.6-7.8	0	0	0	0
	14-60	5.0-10	6.6-7.8	0	0	0	0
125:							
Massadona	0-3	25-40	7.9-8.4	3-8	0-1	0.0-2.0	0-1
	3-50	25-45	7.9-8.4	3-8	0-1	0.0-2.0	0-1
	50-60	25-45	7.9-9.0	3-8	3-5	0.0-4.0	1-3
126:							
Massadona	0-5	15-20	7.9-8.4	3-8	0-1	0.0-2.0	0-1
	5-35	25-45	7.9-8.4	3-8	0-1	0.0-2.0	0-1
	35-60	25-45	7.9-9.0	3-8	3-5	0.0-4.0	1-3
Youngston, moist	0-2	10-20	7.4-8.4	4-15	0-4	0.0-2.0	0-12
	2-60	5.0-20	7.9-9.0	4-15	0-4	2.0-8.0	0-12
127:							
Maudlin	0-12	5.0-15	6.6-7.3	0	0	0	0
	12-21	10-15	6.6-7.8	0	0	0	0
	21-30	10-15	6.6-7.8	0	0	0	0
	30-34	---	---	---	---	---	---
Duffymont	0-4	10-15	6.6-7.8	0	0	0	0
	4-11	5.0-10	6.6-7.8	0	0	0	0
	11-15	---	---	---	---	---	---
128:							
Maybell	0-3	5.0-10	6.6-7.3	0	0	0	0
	3-20	2.0-10	6.6-7.3	0	0	0	0
	20-60	1.0-5.0	6.6-7.8	0-2	0	0	0
129:							
Maybell	0-3	5.0-10	6.6-7.3	0	0	0	0
	3-15	2.0-10	6.6-7.3	0	0	0	0
	15-60	1.0-5.0	6.6-7.8	0-2	0	0	0
130:							
Maysprings	0-7	5.0-10	6.6-7.8	0	0	0	0
	7-22	10-20	6.6-7.8	0	0	0	0
	22-34	5.0-10	6.6-7.8	0	0	0	0
	34-60	2.0-10	7.4-8.4	0-2	0	0	0
131:							
Maysprings	0-7	5.0-10	6.6-7.8	0	0	0	0
	7-22	10-20	6.6-7.8	0	0	0	0
	22-34	5.0-10	6.6-7.8	0	0	0	0
	34-60	2.0-10	7.4-8.4	0-2	0	0	0
Gretdivid	0-3	5.0-10	6.6-7.8	0	0	0	0
	3-7	7.0-15	6.6-7.8	0	0	0	0
	7-60	2.0-5.0	6.6-7.8	0-5	0	0	0
132:							
Milren	0-6	10-20	6.6-7.8	0	0	0	0
	6-20	20-30	6.6-7.8	0	0	0	0
	20-60	20-30	7.9-9.0	5-10	0	0.0-4.0	1-5

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
133:							
Miracle	0-8	10-20	6.6-7.3	0-1	0	0	0
	8-37	10-20	6.6-7.8	0-1	0	0	0
	37-41	---	---	---	---	---	---
Coldspring	0-14	10-15	6.6-7.8	0	0	0	0
	14-34	15-20	6.6-7.8	0	0	0	0
	34-47	10-15	6.6-7.8	0	0	0	0
	47-51	---	---	---	---	---	---
134:							
Morapos	0-10	10-20	6.6-7.3	0	0	0	0
	10-28	25-40	6.6-7.3	0	0	0	0
	28-60	25-40	7.9-9.0	1-3	0	0.0-2.0	0-2
135:							
Morapos	0-10	10-20	6.6-7.3	0	0	0	0
	10-28	25-40	6.6-7.3	0	0	0	0
	28-60	25-40	7.9-9.0	1-3	0	0.0-2.0	0-2
136:							
Morapos	0-9	15-25	6.6-7.8	0	0	0	0
	9-23	25-40	6.6-7.8	0	0	0	0
	23-60	25-40	7.9-9.0	5-15	0	0.0-2.0	0-2
Pagoda	0-9	10-25	6.6-7.3	0	0	0	0
	9-17	15-25	6.6-7.8	0	0	0	0
	17-31	15-30	6.6-7.8	0	0	0	0
	31-60	10-30	7.9-8.4	5-15	0	0.0-2.0	0
137:							
Morset	0-7	5.0-10	6.6-7.8	0	0	0	0
	7-20	10-20	6.6-7.8	0	0	0	0
	20-60	5.0-15	7.4-7.9	15-50	0	0.0-2.0	0-1
Youga	0-12	10-15	6.1-7.3	0	0	0	0
	12-24	10-15	6.1-7.3	0	0	0	0
	24-40	5.0-15	6.6-7.3	0	0	0	0
	40-60	5.0-15	6.6-8.4	0-5	0	0	0
138:							
Moyerson	0-1	25-35	7.9-8.4	2-4	0-1	0.0-2.0	0-1
	1-17	30-50	7.9-9.0	2-4	3-5	2.0-8.0	1-3
	17-21	---	---	---	---	---	---
Rentsac	0-2	5.0-15	7.9-8.4	1-15	0	0	0
	2-10	4.0-10	7.9-8.4	5-10	0	0.0-4.0	0
	10-14	---	---	---	---	---	---
139:							
Muggins	0-1	---	5.1-6.5	---	---	---	---
	1-19	10-15	5.6-6.5	0	0	0	0
	19-23	25-35	5.6-6.5	0	0	0	0
	23-51	30-40	5.6-6.5	0	0	0	0
	51-60	15-25	6.1-6.5	0	0	0	0
140:							
Ninot	0-3	5.0-10	7.9-8.4	0-5	0	0	0
	3-7	10-20	7.9-8.4	10-30	0	0.0-4.0	0
	7-32	10-20	7.9-9.0	25-55	0	0.0-4.0	0-1
	32-60	10-20	8.5-9.0	30-50	0	0.0-4.0	0-1

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
140:							
Crago	0-4	10-20	7.9-8.4	10-15	0	0.0-2.0	0
	4-33	10-20	7.9-9.0	30-60	0	2.0-4.0	0
	33-60	10-20	8.5-9.0	15-25	0	2.0-4.0	0
Garlips	0-8	5.0-10	7.4-7.8	0	0	0	0
	8-21	10-20	7.4-7.8	0	0	0	0
	21-60	10-20	7.9-9.0	10-35	0	0.0-2.0	0-1
141:							
Nortez, cool	0-5	10-30	6.6-7.3	0	0	0	0
	5-10	20-35	6.6-7.3	0	0	0	0
	10-26	20-50	6.6-7.3	0	0	0	0
	26-30	20-50	6.6-7.8	0-1	0	0	0
	30-34	---	---	---	---	---	---
Morapos	0-10	10-20	6.6-7.3	0	0	0	0
	10-28	25-40	6.6-7.3	0	0	0	0
	28-60	25-40	7.9-9.0	1-3	0	0.0-2.0	0-2
142:							
Nortez, cool	0-5	10-30	6.6-7.3	0	0	0	0
	5-10	20-35	6.6-7.3	0	0	0	0
	10-26	20-50	6.6-7.3	0	0	0	0
	26-30	20-50	6.6-7.8	0-1	0	0	0
	30-34	---	---	---	---	---	---
Morapos	0-10	10-20	6.6-7.3	0	0	0	0
	10-28	25-40	6.6-7.3	0	0	0	0
	28-60	25-40	7.9-9.0	1-3	0	0.0-2.0	0-2
143:							
Nunemaker	0-1	20-35	6.6-7.3	0-2	0	0	0
	1-26	25-40	7.4-8.4	0-5	0	0.0-2.0	0
	26-40	25-40	7.9-8.4	1-5	2-5	2.0-4.0	10-15
	40-45	20-35	7.9-8.4	1-5	1-3	2.0-4.0	5-15
	45-60	10-20	7.9-8.4	0-5	0	2.0-4.0	5-15
144:							
Pagoda	0-9	10-25	6.6-7.3	0	0	0	0
	9-17	15-25	6.6-7.8	0	0	0	0
	17-25	15-30	6.6-7.8	0	0	0	0
	25-60	10-30	7.9-8.4	5-15	0	0.0-2.0	0
145:							
Pagoda	0-9	15-25	6.6-7.8	0	0	0	0
	9-17	15-25	6.6-7.8	0	0	0	0
	17-25	15-30	6.6-7.8	0	0	0	0
	25-60	10-30	7.9-8.4	5-15	0	0.0-2.0	0
146:							
Pavillion	0-3	10-15	7.4-7.8	1-10	0	0	0
	3-36	10-15	7.4-9.0	5-10	0	0	0
	36-40	---	---	---	---	---	---
Degater	0-3	30-40	7.9-8.4	2-5	0	0	0
	3-22	30-40	7.9-9.0	5-15	0	0.0-2.0	1-5
	22-30	25-40	7.9-9.0	5-15	0-2	2.0-4.0	1-5
	30-34	---	---	---	---	---	---

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
147:							
Peeler	0-1	---	5.1-6.5	---	---	---	---
	1-18	5.0-10	6.1-7.8	0	0	0	0
	18-45	10-20	5.6-6.5	0	0	0	0
	45-60	5.0-20	5.6-6.5	0	0	0	0
148:							
Pilotpeak	0-2	5.0-10	7.9-8.4	3-10	0	0.0-2.0	0
	2-6	5.0-10	7.9-8.4	10-20	0	0.0-2.0	0
	6-17	5.0-10	7.9-8.4	20-35	0	0.0-2.0	0
	17-21	---	---	---	---	---	---
Grubrob	0-3	4.0-10	7.4-7.8	0	0	0	0
	3-18	5.0-15	7.4-7.8	0-5	0	0	0
	18-28	4.0-10	7.9-8.4	15-30	0	0.0-2.0	0
	28-32	---	---	---	---	---	---
149:							
Pinelli	0-6	10-15	6.6-7.8	0	0	0	0
	6-18	25-35	7.4-7.8	0	0	0	0
	18-60	20-30	7.9-8.4	5-15	0	0.0-2.0	0
150:							
Pinelli	0-4	15-20	6.6-7.8	0	0	0	0
	4-21	25-35	7.4-7.8	0	0	0	0
	21-60	20-30	7.9-8.4	5-15	0	0.0-2.0	0
151:							
Pinelli, dry	0-7	10-15	6.6-7.8	0	0	0	0
	7-20	25-35	7.4-7.8	0	0	0	0
	20-60	20-30	7.9-8.4	5-15	0	0.0-2.0	0
152:							
Pinridge	0-5	10-20	7.4-7.8	0	0	0	0
	5-20	10-20	7.4-7.8	0-2	0	0	0
	20-41	10-20	7.4-8.4	3-5	0	0	0
	41-60	5.0-15	7.4-8.4	3-5	0	0	0
153:							
Pricecreek	0-4	20-30	7.9-8.4	3-5	0	0.0-2.0	0-2
	4-21	20-30	8.5-9.0	3-5	0	0.0-2.0	2-8
	21-35	20-30	8.5-9.6	5-15	0	2.0-4.0	8-16
	35-60	20-30	7.9-9.0	5-15	0	2.0-4.0	2-8
154:							
Quealman	0-3	0.0-5.0	7.4-7.8	1-10	0	0.0-2.0	0
	3-40	4.0-10	7.4-8.4	1-10	0	0.0-2.0	0
	40-60	2.0-10	7.4-8.4	1-10	0	0.0-2.0	0
155:							
Rencot	0-2	10-20	7.9-8.4	5-15	0	0.0-2.0	0
	2-13	5.0-15	7.9-8.4	15-40	0	0.0-2.0	0
	13-17	---	---	---	---	---	---
Duffymont	0-2	10-15	6.6-7.8	0	0	0	0
	2-12	5.0-10	6.6-7.8	0	0	0	0
	12-16	---	---	---	---	---	---
156:							
Rentsac	0-3	5.0-15	7.9-8.4	1-15	0	0	0
	3-10	4.0-10	7.9-8.4	5-10	0	0.0-4.0	0
	10-14	---	---	---	---	---	---

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
157:							
Rentsac	0-2	4.0-10	7.9-8.4	1-5	0	0	0
	2-10	4.0-10	7.9-8.4	5-10	0	0.0-4.0	0
	10-14	---	---	---	---	---	---
Moyerson	0-1	20-30	7.9-8.4	2-4	0-1	0.0-2.0	0-1
	1-17	30-50	7.9-9.0	2-4	3-5	2.0-8.0	1-3
	17-21	---	---	---	---	---	---
158:							
Rock outcrop	0-60	---	---	---	---	0	---
Earsman	0-2	5.0-10	7.4-7.8	0	0	0	0
	2-12	5.0-10	7.4-8.4	1-10	0	0	0
	12-16	---	---	---	---	---	---
159:							
Rock outcrop	0-60	---	---	---	---	0	---
Haploborolls	0-8	5.0-15	6.6-7.3	0	0	0	0
	8-24	5.0-15	6.6-7.8	0	0	0	0
	24-28	---	---	---	---	---	---
160:							
Rock outcrop	0-60	---	---	---	---	0	---
Torriorthents	0-2	5.0-15	7.4-8.4	0-5	0	0	0
	2-14	10-15	7.4-8.4	3-10	0	0	0
	14-18	---	---	---	---	---	---
161:							
Rock River	0-3	10-15	6.6-7.8	0	0	0	0
	3-22	10-15	6.6-7.8	0	0	0	0
	22-32	10-15	7.9-8.4	5-15	0	0.0-2.0	0
	32-60	5.0-10	7.9-8.4	5-15	0	0.0-2.0	0
162:							
Rock River	0-3	10-15	6.6-7.3	0	0	0	0
	3-22	10-15	6.6-7.8	0	0	0	0
	22-32	10-15	7.9-8.4	5-15	0	0.0-2.0	0
	32-60	5.0-10	7.9-8.4	5-15	0	0.0-2.0	0
163:							
Rock River	0-3	10-15	6.6-7.8	0	0	0	0
	3-22	10-15	6.6-7.8	0	0	0	0
	22-32	10-15	7.9-8.4	5-15	0	0.0-2.0	0
	32-60	5.0-10	7.9-8.4	5-15	0	0.0-2.0	0
164:							
Rock River	0-2	5.0-15	6.6-7.8	0	0	0	0
	2-21	10-15	6.6-7.8	0	0	0	0
	21-48	10-15	7.9-8.4	5-15	0	0.0-2.0	0
	48-60	5.0-10	7.9-8.4	5-15	0	0.0-2.0	0
Taffom	0-8	5.0-10	6.6-7.8	0	0	0	0
	8-41	10-20	6.6-7.8	0	0	0	0
	41-50	5.0-15	6.6-7.8	0	0	0	0
	50-60	2.0-15	7.4-8.4	1-5	0	0	0

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
165:							
Rogrube sandy loam---	0-3	10-20	7.4-9.0	5-10	0-1	0.0-4.0	2-5
	3-28	15-20	7.9-9.0	15-35	1-2	4.0-8.0	3-8
	28-60	15-20	7.4-8.4	10-20	10-15	4.0-8.0	3-8
Rogrube clay loam----	0-3	15-20	7.9-9.0	5-10	0-1	0.0-4.0	2-5
	3-28	15-20	7.9-9.0	15-35	1-2	4.0-8.0	3-8
	28-60	15-20	7.4-8.4	10-20	10-15	4.0-8.0	3-8
166:							
Routt----------	0-2	---	5.1-6.5	---	---	---	---
	2-27	10-20	6.6-7.3	0	0	0	0
	27-33	15-25	6.6-7.3	0	0	0	0
	33-60	15-30	6.6-7.3	0	0	0	0
167:							
Routt----------	0-24	10-20	6.1-7.3	0	0	0	0
	24-35	15-25	6.6-7.3	0	0	0	0
	35-60	15-30	6.6-7.8	0	0	0	0
Cochetopa----------	0-5	15-20	6.6-7.3	0	0	0	0
	5-21	15-25	6.6-7.3	0	0	0	0
	21-30	25-35	6.6-7.3	0	0	0	0
	30-60	25-35	6.6-7.3	0	0	0	0
Binco----------	0-4	30-45	7.4-7.8	0	0	0	0
	4-35	20-30	7.4-7.8	0-2	0	0	0
	35-60	30-50	7.9-8.4	1-5	0-2	0	0
168:							
Ruedloff----------	0-4	5.0-10	7.4-7.8	0	0	0	0
	4-20	5.0-10	7.4-8.4	0-5	0	0	0
	20-60	1.0-5.0	7.9-8.4	5-10	0	0.0-2.0	0
169:							
Ruedloff----------	0-2	5.0-10	7.4-7.8	1-5	0	0	0
	2-24	5.0-10	7.4-8.4	0-5	0	0	0
	24-60	1.0-5.0	7.9-8.4	5-10	0	0.0-2.0	0
Dunul----------	0-3	3.0-10	7.9-8.4	3-8	0	0.0-2.0	0
	3-20	3.0-5.0	7.9-8.4	5-10	0	0.0-2.0	0
	20-31	1.0-5.0	7.9-8.4	5-15	0	0.0-2.0	0
	31-60	1.0-5.0	7.9-8.4	5-15	0	0.0-2.0	0
170:							
Ryan Park----------	0-5	5.0-10	7.4-7.8	0	0	0	0
	5-23	5.0-15	7.4-7.8	0	0	0	0
	23-30	5.0-15	7.9-8.4	1-2	0	0.0-2.0	0-1
	30-60	5.0-10	7.9-8.4	1-2	0	0.0-2.0	0-1
171:							
Ryan Park----------	0-5	5.0-10	7.4-7.8	0	0	0	0
	5-23	5.0-15	7.4-7.8	0	0	0	0
	23-30	5.0-15	7.9-8.4	1-2	0	0.0-2.0	0-1
	30-39	5.0-10	7.9-8.4	1-2	0	0.0-2.0	0-1
	39-60	5.0-10	7.4-7.8	1-2	0	0.0-2.0	0-1
172:							
Ryan Park----------	0-5	5.0-10	7.4-7.8	0	0	0	0
	5-30	5.0-15	7.4-7.8	0	0	0	0
	30-60	5.0-10	7.9-8.4	1-2	0	0.0-2.0	0-1

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
172:							
Coyet	0-6	5.0-10	7.4-8.4	0-5	0	0	0
	6-22	3.0-10	7.4-8.4	5-10	0	0	0
	22-60	3.0-10	7.9-9.0	5-10	0	0.0-2.0	0-3
173:							
Ryark	0-6	5.0-10	6.6-7.3	0	0	0	0
	6-19	5.0-10	7.4-7.8	0	0	0	0
	19-30	5.0-10	7.4-7.8	0	0	0	0
	30-60	5.0-10	7.4-7.8	0	0	0	0
Powderwash	0-3	5.0-10	6.6-7.3	0	0	0	0
	3-15	5.0-10	6.6-7.3	0	0	0	0
	15-22	5.0-10	6.6-7.3	0	0	0	0
	22-38	30-40	7.4-8.4	1-3	0	0	0-1
	38-42	---	---	1-5	---	---	---
174:							
Ryark	0-6	5.0-10	6.6-7.8	0	0	0	0
	6-19	5.0-10	7.4-7.8	0	0	0	0
	19-30	5.0-10	7.4-7.8	0	0	0	0
	30-60	5.0-10	7.4-7.8	0	0	0	0
Maybell	0-3	5.0-10	6.6-7.3	0	0	0	0
	3-20	2.0-10	6.6-7.3	0	0	0	0
	20-60	1.0-5.0	6.6-7.8	0-2	0	0	0
175:							
Sandwash	0-2	5.0-15	7.9-8.4	5-10	0	0	0
	2-16	5.0-15	7.9-8.4	30-50	0	0	0-1
	16-22	10-20	7.9-9.0	40-70	0	0.0-2.0	1-2
	22-26	---	---	---	---	---	---
Langspring	0-3	10-15	7.9-8.4	5-10	0	0	0
	3-42	10-15	8.5-9.0	15-40	0	0.0-2.0	2-5
	42-60	10-15	7.9-9.0	10-20	0-2	0.0-4.0	0-3
Baston	0-1	5.0-15	8.5-9.0	1-10	0-1	2.0-4.0	10-20
	1-28	25-40	8.5-9.6	2-10	5-10	4.0-16.0	15-30
	28-32	---	---	---	---	---	---
176:							
Schooner	0-4	2.0-5.0	6.1-7.8	0	0	0.0-2.0	0
	4-14	1.0-5.0	6.1-7.8	0	0	0.0-2.0	0
	14-18	---	---	---	---	---	---
Rock outcrop	0-60	---	---	---	---	0	---
177:							
Schooner	0-4	2.0-5.0	7.4-7.8	0	0	0.0-2.0	0
	4-14	1.0-5.0	7.4-7.8	0	0	0.0-2.0	0
	14-18	---	---	---	---	---	---
Tricera	0-4	4.0-10	6.6-7.8	0	0	0	0
	4-47	1.0-10	7.4-7.8	0	0	0	0
	47-60	1.0-5.0	7.4-8.4	0-5	0	0.0-2.0	0
178:							
Simanni	0-10	5.0-10	7.4-8.4	0-1	0	0	0
	10-22	5.0-10	7.4-8.4	0-1	0	0	0
	22-33	5.0-10	7.9-9.0	3-10	0	0.0-2.0	0
	33-60	5.0-10	7.9-9.0	3-10	0	0.0-2.0	0

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
178:							
Ruedloff	0-2	5.0-10	7.4-7.8	1-5	0	0	0
	2-24	5.0-10	7.4-8.4	0-5	0	0	0
	24-60	1.0-5.0	7.9-8.4	5-10	0	0.0-2.0	0
179:							
Skyway, dry	0-20	5.0-30	6.6-7.3	0-1	0	0	0
	20-31	4.0-10	6.6-7.3	0-1	0	0	0
	31-35	---	---	---	---	---	---
180:							
Spool	0-4	3.0-10	6.6-7.3	0	0	0	0
	4-12	2.0-10	6.6-7.3	0	0	0	0
	12-16	---	---	---	---	---	---
Maybell	0-3	5.0-10	6.6-7.3	0	0	0	0
	3-32	2.0-10	6.6-7.3	0	0	0	0
	32-60	1.0-5.0	6.6-7.8	0-2	0	0	0
181:							
Stunner	0-4	5.0-10	6.6-7.3	1-5	0	0	0
	4-15	5.0-15	6.6-7.8	5-10	0	0	0
	15-24	3.0-10	6.6-7.8	15-20	0	0	0
	24-43	3.0-10	7.9-9.0	20-40	0	2.0-4.0	0
	43-60	2.0-10	7.9-9.0	15-25	0	0.0-2.0	0
182:							
Stunner, moist	0-5	10-20	7.9-8.4	0	0	0.0-2.0	0
	5-17	10-20	7.9-8.4	3-10	0	0.0-2.0	0
	17-42	10-20	7.9-9.0	25-50	0	0.0-2.0	0-1
	42-60	10-20	7.9-8.4	10-25	0	2.0-4.0	0-1
Emlin	0-11	10-15	6.6-7.8	0-1	0	0	0
	11-19	10-20	7.9-8.4	0-1	0	0	0
	19-60	10-20	7.9-9.0	15-40	0	0.0-4.0	0-1
183:							
Styers	0-1	30-40	7.4-8.4	0-1	0	0	0
	1-35	40-50	7.4-8.4	1-3	0	0	0
	35-39	---	---	---	---	---	---
Ironsprings	0-14	5.0-10	6.6-7.3	0	0	0	0
	14-40	5.0-10	6.6-7.3	0	0	0	0
	40-60	2.0-5.0	6.6-7.8	0	0	0	0
Maysprings	0-7	5.0-10	6.6-7.8	0	0	0	0
	7-22	10-20	6.6-7.8	0	0	0	0
	22-28	5.0-10	6.6-7.8	0	0	0	0
	28-60	2.0-10	7.4-8.4	0-2	0	0	0
184:							
Styers	0-1	20-35	7.4-7.8	0-1	0	0	0
	1-28	40-50	7.4-8.4	1-3	0	0	0
	28-32	---	---	---	---	---	---
Pinelli	0-8	10-15	6.6-7.8	0	0	0	0
	8-26	25-35	7.4-7.8	0	0	0	0
	26-60	20-30	7.9-8.4	5-15	0	0.0-2.0	0

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
184:							
Taffom	0-6	5.0-10	6.6-7.8	0	0	0	0
	6-43	10-20	6.6-7.8	0	0	0	0
	43-53	5.0-15	6.6-7.8	0	0	0	0
	53-60	2.0-15	7.4-8.4	1-5	0	0	0
185:							
Taffom	0-6	5.0-10	6.6-7.8	0	0	0	0
	6-43	10-20	6.6-7.8	0	0	0	0
	43-53	5.0-15	7.4-8.4	0	0	0	0
	53-60	2.0-15	7.4-8.4	1-5	0	0	0
186:							
Talamantes	0-3	10-20	7.4-8.4	2-5	0	0.0-2.0	1-3
	3-48	10-25	7.4-9.0	2-5	0	0.0-2.0	2-4
	48-60	10-20	7.4-9.0	2-5	0-1	0.0-2.0	1-3
187:							
Talamantes	0-3	10-20	7.4-8.4	2-5	0	0.0-2.0	1-3
	3-48	10-25	7.4-9.0	2-5	0	0.0-2.0	2-4
	48-60	10-20	7.4-8.4	2-5	0-1	0.0-2.0	1-3
188:							
Talamantes, saline	0-3	10-25	7.9-8.4	2-5	0-1	4.0-8.0	3-5
	3-24	10-25	7.9-9.0	2-5	5-10	8.0-16.0	3-8
	24-60	10-25	7.9-9.0	2-5	5-10	8.0-16.0	3-8
189:							
Tipper	0-1	3.0-10	7.9-8.4	1-5	0	0.0-4.0	0
	1-28	2.0-10	7.9-9.0	1-5	0	0.0-4.0	0
	28-32	---	---	---	---	---	---
Crustown	0-1	3.0-10	7.9-8.4	5-10	0	0	0
	1-10	3.0-10	7.9-8.4	5-10	0	0	0
	10-14	---	---	---	---	---	---
190:							
Tipperary	0-3	0.0-4.0	7.9-9.0	0-5	0	0.0-2.0	0
	3-60	0.0-6.0	7.9-9.0	0-5	0	0.0-2.0	0
191:							
Tipperary	0-3	2.0-12	7.9-8.4	0-5	0	0.0-2.0	0
	3-60	0.0-6.0	7.9-9.0	1-5	0	0.0-2.0	0
192:							
Tipperary	0-3	2.0-12	7.9-8.4	0-5	0	0.0-2.0	0
	3-60	0.0-6.0	7.9-9.0	0-5	0	0.0-2.0	0
Willwood	0-16	5.0-10	7.9-8.4	5-15	0	0.0-2.0	0
	16-60	5.0-10	7.9-8.4	5-15	0	0.0-2.0	0
193:							
Tisworth	0-3	10-15	7.4-8.4	0-2	0	0.0-2.0	1-5
	3-18	10-15	8.5-9.6	2-10	0	8.0-16.0	15-30
	18-60	5.0-10	8.5-9.0	5-15	0-2	8.0-16.0	10-30
194:							
Tolman	0-6	10-15	6.6-7.8	0	0	0	0
	6-15	10-15	6.6-7.8	0	0	0	0
	15-19	---	---	---	---	---	---

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
194:							
Duffymont	0-4	10-15	7.4-7.8	0	0	0	0
	4-11	5.0-10	7.4-7.8	0	0	0	0
	11-15	---	---	---	---	---	---
195:							
Torriorthents	0-8	5.0-20	7.9-9.0	3-10	0-5	0.0-4.0	3-10
	8-12	---	---	---	---	---	---
196:							
Torriorthents	0-8	5.0-20	7.9-9.0	3-10	0-5	0.0-4.0	3-10
	8-12	---	---	---	---	---	---
Baston	0-1	5.0-15	8.5-9.0	1-10	0-1	2.0-4.0	10-20
	1-28	25-40	8.5-9.6	2-10	5-10	4.0-16.0	15-30
	28-32	---	---	---	---	---	---
197:							
Torriorthents	0-2	5.0-15	7.4-9.0	0-5	0	0	0
	2-14	10-15	7.4-9.0	3-10	0	0	0
	14-18	---	---	---	---	---	---
Rock outcrop, sandstone	0-60	---	---	---	---	0	---
198:							
Torriorthents	0-8	15-30	7.4-8.4	3-10	2-10	4.0-16.0	3-10
	8-12	---	---	---	---	---	---
Rock outcrop, shale	0-60	---	---	---	---	0	---
199:							
Torriorthents	0-2	15-20	7.9-8.4	1-5	0	0	0
	2-15	10-25	7.9-8.4	3-10	0	0	0
	15-19	---	---	---	---	---	---
Torripsamments	0-4	1.0-5.0	6.6-7.8	0-2	0-1	0.0-2.0	0-1
	4-26	1.0-10	6.6-8.4	0-2	0-1	0.0-2.0	0-1
	26-30	---	---	---	---	---	---
200:							
Tresano	0-8	5.0-10	7.4-7.8	0	0	0	0
	8-30	10-20	7.4-9.0	0-10	0	0	0
	30-60	5.0-15	7.9-8.4	5-10	0	0.0-2.0	0
201:							
Tresano	0-2	5.0-15	7.4-8.4	0	0	0	0
	2-28	10-20	7.4-8.4	0-10	0	0	0
	28-60	5.0-15	7.9-9.0	5-10	0	0.0-2.0	0
Hiatha	0-2	25-35	7.9-8.4	1-5	0	0.0-2.0	0
	2-14	25-35	7.9-9.0	1-5	0-2	0.0-2.0	3-7
	14-18	---	---	---	---	---	---
Kandaly	0-3	0.0-5.0	7.9-8.4	1-5	0	0	0-10
	3-60	0.0-5.0	7.9-8.4	1-5	0	0.0-2.0	0-10
202:							
Turzo	0-4	10-15	7.9-8.4	5-15	0-1	0.0-2.0	0-3
	4-23	10-15	7.9-9.0	5-15	0-1	0.0-2.0	0-3
	23-60	10-15	7.9-9.0	5-15	0-1	2.0-4.0	0-3

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
203:							
Turzo, saline--------	0-3	10-15	7.9-8.4	5-10	0	0.0-2.0	5-10
	3-18	10-15	7.9-8.4	5-10	0	0.0-4.0	5-10
	18-34	10-15	8.5-9.0	5-10	0	8.0-16.0	10-13
	34-60	10-15	8.5-9.0	5-10	0	16.0-32.0	10-13
204:							
Typic Natrargids-----	0-2	5.0-15	7.9-9.0	0-1	0-1	2.0-4.0	10-15
	2-18	20-40	8.5-9.6	1-2	0-1	4.0-16.0	20-35
	18-35	15-40	9.1-11.0	2-4	1-5	4.0-16.0	15-25
	35-60	10-25	8.5-11.0	2-4	1-5	4.0-16.0	10-20
205:							
Uffens---------------	0-4	5.0-10	8.5-9.6	0-1	0	2.0-4.0	5-10
	4-12	10-20	9.1-9.6	0-1	0	4.0-8.0	15-25
	12-37	5.0-15	8.5-9.6	2-4	0	4.0-8.0	15-25
	37-60	5.0-10	8.5-9.6	1-2	0	2.0-4.0	10-20
206:							
Ustorthents,							
frigid--------------	0-3	5.0-15	6.6-8.4	0-5	0	0	0
	3-28	10-25	6.6-8.4	3-10	0	0	0
	28-32	---	---	---	---	---	---
Borolls--------------	0-19	10-25	6.6-7.3	0-5	0	0	0
	19-30	10-25	6.6-7.3	0-5	0	0	0
	30-34	---	---	---	---	---	---
207:							
Vermillion-----------	0-3	5.0-15	7.9-8.4	1-3	0	0	0-1
	3-23	10-20	7.9-9.0	15-40	0	0.0-4.0	1-2
	23-28	10-20	7.9-9.0	15-40	0	0.0-4.0	1-2
	28-32	---	---	---	---	---	---
Langspring-----------	0-3	10-15	7.9-8.4	5-10	0	0	0
	3-17	10-15	8.5-9.0	15-40	0	0.0-2.0	2-5
	17-60	10-15	7.9-9.0	10-20	0-2	0.0-4.0	0-3
208:							
Wallson--------------	0-3	5.0-10	6.6-7.8	0	0	0	0
	3-38	5.0-10	6.6-7.8	0	0	0	0
	38-48	5.0-10	7.9-8.4	5-15	0	0.0-2.0	0
	48-60	5.0-15	7.9-8.4	5-10	0	0.0-2.0	0
Tricera--------------	0-4	4.0-10	6.6-7.8	0	0	0	0
	4-47	1.0-10	7.4-7.8	0	0	0	0
	47-60	1.0-5.0	7.9-8.4	1-5	0	0.0-2.0	0
209:							
Weed-----------------	0-10	10-15	6.6-7.8	0	0	0	0
	10-28	10-20	6.6-7.8	0	0	0	0
	28-41	10-20	7.4-8.4	1-5	0	0.0-2.0	0
	41-60	5.0-15	7.9-8.4	1-5	0	0.0-2.0	0
210:							
Willwood-------------	0-8	5.0-10	7.9-8.4	1-2	0	0	0-1
	8-60	5.0-10	7.9-8.4	1-2	0	0.0-2.0	0-1
Sheppard, cool-------	0-4	4.0-10	7.9-8.4	1-5	0	0.0-2.0	0
	4-60	5.0-10	7.9-8.4	1-5	0	0.0-2.0	0

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
211:							
Willwood	0-2	5.0-10	7.9-8.4	1-2	0	0	0-1
	2-11	5.0-10	7.9-8.4	1-2	0	0	0-1
	11-60	5.0-10	7.9-8.4	1-2	0	0.0-2.0	0-1
Tipperary	0-3	2.0-12	7.9-8.4	0-5	0	0.0-2.0	0
	3-60	0.0-6.0	7.9-9.0	0-5	0	0.0-2.0	0
212:							
Willwood	0-10	5.0-10	7.9-8.4	1-2	0	0	0-1
	10-60	5.0-10	7.9-8.4	1-2	0	0.0-2.0	0-1
Tipperary, cobbly substratum	0-4	5.0-10	7.9-8.4	1-3	0	0.0-2.0	0-1
	4-36	5.0-10	7.9-9.0	2-4	0	0.0-2.0	1-3
	36-60	5.0-10	7.9-9.0	2-4	0	0.0-2.0	1-3
213:							
Winevada	0-10	10-15	6.6-7.3	0	0	0	0
	10-25	10-15	6.6-7.3	0	0	0	0
	25-29	---	---	---	---	---	---
Splitro	0-1	---	5.1-6.5	---	---	---	---
	1-12	10-15	6.6-7.3	0	0	0	0
	12-14	5.0-15	6.6-7.3	0	0	0	0
	14-17	---	---	---	---	---	---
214:							
Winevada	0-1	---	5.1-6.5	---	---	---	---
	1-11	10-15	6.1-7.3	0	0	0	0
	11-26	10-15	6.1-7.3	0	0	0	0
	26-29	---	---	---	---	---	---
Splitro	0-1	---	5.1-6.5	---	---	---	---
	1-12	10-15	6.6-7.3	0	0	0	0
	12-14	5.0-15	6.6-7.3	0	0	0	0
	14-17	---	---	---	---	---	---
215:							
Winkleman	0-6	15-20	7.9-8.4	3-5	0	2.0-4.0	0
	6-60	15-25	7.9-9.0	3-5	0	2.0-4.0	1-5
216:							
Yamo	0-5	10-20	7.4-8.4	1-2	0	0	0
	5-22	10-20	7.4-8.4	1-2	0	0	0
	22-60	10-20	7.9-8.4	2-10	0	0.0-2.0	0-1
217:							
Yamo	0-5	10-20	7.4-8.4	1-2	0	0	0
	5-22	10-20	7.4-8.4	1-2	0	0	0
	22-60	10-20	7.9-8.4	2-10	0	0.0-2.0	0-1
218:							
Yellowwash	0-2	10-20	7.9-8.4	3-10	0	2.0-16.0	0
	2-10	10-15	7.9-8.4	3-10	0	2.0-16.0	0
	10-14	---	---	---	---	---	---
Piezon	0-4	10-20	7.9-8.4	5-10	0	0	0
	4-30	10-15	7.9-8.4	15-25	0	0.0-2.0	0
	30-34	---	---	---	---	---	---

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
219:							
Youga	0-13	15-20	6.1-7.3	0	0	0	0
	13-39	15-20	6.1-7.3	0	0	0	0
	39-60	10-20	6.1-7.8	0	0	0	0
220:							
Youga	0-12	10-15	6.1-7.3	0	0	0	0
	12-24	10-15	6.1-7.3	0	0	0	0
	24-36	5.0-15	6.6-7.3	0	0	0	0
	36-60	5.0-15	6.6-8.4	0-5	0	0	0
Dinnen	0-10	5.0-15	6.6-7.3	0	0	0	0
	10-20	5.0-10	6.6-7.3	0	0	0	0
	20-41	5.0-10	6.6-7.3	0	0	0	0
	41-60	5.0-10	7.4-7.8	0	0	0	0
221:							
Youga	0-10	10-15	6.1-7.3	0	0	0	0
	10-42	10-15	6.1-7.3	0	0	0	0
	42-60	5.0-15	6.6-8.4	0-5	0	0	0
Gelkie	0-2	10-15	6.6-7.3	0	0	0	0
	2-10	15-20	6.6-7.3	0	0	0	0
	10-22	10-20	7.4-7.8	0	0	0	0
	22-50	10-20	7.9-8.4	3-10	0	0	0
	50-60	5.0-10	7.9-8.4	1-10	0	0	0
Clayburn, warm	0-2	---	5.1-6.5	---	---	---	---
	2-16	10-15	6.1-7.3	0	0	0	0
	16-39	15-20	6.1-7.3	0	0	0	0
	39-60	10-15	6.1-7.3	0	0	0	0
222:							
Youngston, cool	0-9	10-20	7.9-8.4	4-10	0	2.0-4.0	0
	9-60	10-15	7.9-9.0	4-10	0	2.0-8.0	3-10
223:							
Youngston, well drained	0-3	10-20	7.4-8.4	4-15	0-4	0.0-2.0	0-12
	3-60	5.0-20	7.9-9.0	4-15	0-4	2.0-8.0	0-12
224:							
Zillion	0-7	10-15	7.4-7.8	0	0	0	0
	7-18	10-15	7.4-7.8	0	0	0	0
	18-26	10-15	7.4-7.8	0	0	0	0
	26-60	10-15	7.9-8.4	15-40	0	0	0
Barkelew, moist	0-2	10-15	7.9-8.4	0	0	0	0
	2-7	10-20	7.9-8.4	0	0	0	0
	7-16	10-20	7.9-8.4	0	0	0	0
	16-34	10-20	7.9-9.0	20-40	0	0.0-2.0	0-1
	34-60	10-15	7.9-9.0	10-30	0	0.0-2.0	0-1
Grapit	0-9	10-20	7.4-8.4	5-15	0	0.0-2.0	0
	9-36	10-15	7.9-8.4	40-50	0	0.0-2.0	0
	36-60	5.0-15	7.9-8.4	30-45	0	0.0-2.0	0
225:							
Abracon	0-4	8.0-20	7.9-9.0	5-20	0	0.0-2.0	0-5
	4-10	7.0-15	7.9-9.0	5-25	0	0.0-2.0	0-5
	10-51	6.0-15	7.9-9.0	15-40	0	0.0-2.0	5-10
	51-60	6.0-12	7.9-9.0	5-25	0	0.0-2.0	5-10

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
225:							
Solirec	0-4	6.0-14	7.4-8.4	0	0	0.0-2.0	0
	4-12	9.0-18	7.4-8.4	0	0	0.0-2.0	0
	12-19	8.0-17	7.9-8.4	10-20	0	0.0-2.0	0
	19-75	11-20	7.9-9.0	15-40	0	0.0-2.0	0-5
226:							
Arches	0-2	1.0-2.0	7.9-8.4	0-5	0	0	0
	2-5	1.0-2.0	7.9-8.4	0-5	0	0	0
	5-9	0.0-1.0	7.9-8.4	1-5	0	0	0
	9-13	---	---	---	---	---	---
Mespun	0-3	1.0-7.0	6.6-8.4	0	0	0	0
	3-60	1.0-6.0	6.6-8.4	0	0	0	0
Rock outcrop	0-60	---	---	---	---	---	---
227:							
Bankard Family	0-2	0.0-5.0	6.6-8.4	0-10	0	0.0-2.0	0
	2-60	0.0-5.0	7.4-8.4	0-25	0	0.0-2.0	0
Cameo	0-2	1.0-10	7.9-9.0	0-25	0	0.0-2.0	0
	2-60	2.0-10	7.9-9.0	10-30	0	0.0-2.0	0
228:							
Bondman	0-2	5.0-15	6.6-7.8	0-5	0	0	0
	2-8	5.0-20	6.6-7.8	0-15	0	0	0
	8-12	---	---	---	---	---	---
Rock outcrop	0-60	---	---	---	---	---	---
229:							
Cameo	0-2	1.0-10	7.9-9.0	0-25	0	0.0-2.0	0
	2-60	2.0-10	7.9-9.0	10-30	0	0.0-2.0	0
230:							
Cragnot	0-3	5.0-15	7.4-8.4	0-25	0	0	0
	3-12	2.0-15	7.9-9.0	30-60	0	0	0
	12-38	2.0-15	7.9-9.0	40-60	0	0.0-2.0	0
	38-60	1.0-15	7.9-9.0	40-60	0	0.0-2.0	0
Pensore	0-3	5.0-15	7.4-8.4	0-25	0	0	0
	3-10	2.0-15	7.4-9.0	10-40	0	0	0
	10-16	1.0-10	7.9-9.0	40-60	0	0	0
	16-20	---	---	---	---	---	---
Grapit	0-5	10-20	7.4-8.4	5-15	0	0.0-2.0	0
	5-14	10-20	7.4-8.4	5-15	0	0.0-2.0	0
	14-30	5.0-15	7.9-9.0	40-50	0	0.0-2.0	0
	30-54	5.0-10	7.9-9.0	40-50	0	0.0-2.0	0
	54-60	3.0-10	7.9-9.0	30-45	0	0.0-2.0	0
231:							
Green River	0-5	4.0-13	7.9-9.0	2-10	0	2.0-4.0	5-10
	5-60	2.0-11	7.9-9.0	5-15	0-2	4.0-8.0	5-15
Fluvaquents	0-5	0.0-10	6.6-8.4	0-25	0	0.0-2.0	0
	5-60	0.0-20	6.6-8.4	0-25	0	0.0-2.0	0

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
232:							
Lakebench	0-3	4.0-10	7.4-7.8	5-15	0	0	0
	3-9	4.0-10	7.4-8.4	15-40	0	0	0
	9-45	4.0-10	7.4-8.4	20-40	0	0	0
	45-50	3.0-10	7.4-8.4	15-25	0	0.0-2.0	0
	50-60	3.0-10	7.4-8.4	15-25	0	0.0-2.0	0
Strell	0-3	1.0-5.0	6.6-8.4	0-15	0	0	0
	3-13	0.0-5.0	7.4-8.4	10-25	0	0	0
	13-17	---	---	---	---	---	---
233:							
Lakebench	0-3	4.0-10	7.4-7.8	5-15	0	0	0
	3-9	4.0-10	7.4-8.4	15-40	0	0	0
	9-45	4.0-10	7.4-8.4	20-40	0	0	0
	45-50	3.0-10	7.4-8.4	15-25	0	0.0-2.0	0
	50-60	3.0-10	7.4-8.4	15-25	0	0.0-2.0	0
Yampa	0-7	4.0-10	7.4-8.4	5-20	0	0.0-2.0	0
	7-13	2.0-10	7.9-9.0	20-35	0	0.0-2.0	0
	13-31	4.0-15	7.9-9.0	30-40	0	0.0-2.0	0-1
	31-60	1.0-5.0	7.9-9.0	10-20	0	2.0-4.0	0-1
234:							
Mantlemine	0-5	5.0-15	6.6-7.8	0	0	0	0
	5-20	5.0-20	6.6-7.8	0-10	0	0	0
	20-25	5.0-20	7.4-8.4	5-20	0	0	0
	25-45	5.0-20	7.4-8.4	15-25	0	0	0
	45-60	5.0-15	7.4-8.4	15-25	0	0	0
235:							
Mantlemine	0-5	5.0-15	6.6-7.8	0	0	0	0
	5-20	5.0-20	6.6-7.8	0-10	0	0	0
	20-25	5.0-20	7.4-8.4	5-20	0	0	0
	25-45	5.0-20	7.4-8.4	15-25	0	0	0
	45-60	5.0-15	7.4-8.4	15-25	0	0	0
Emlin	0-11	10-25	6.6-7.8	0-1	0	0	0
	11-19	10-20	7.4-8.4	0-1	0	0	0
	19-60	10-20	7.9-9.0	20-30	0	0.0-4.0	0-1
236:							
Mido	0-8	2.0-5.0	7.4-7.8	1-10	0	0.0-2.0	0
	8-60	2.0-5.0	7.4-7.8	1-10	0	0.0-2.0	0
237:							
Mikim loam	0-6	10-20	7.9-8.4	5-10	0	0.0-2.0	0
	6-60	5.0-20	8.5-9.0	5-15	0	0.0-2.0	0
Mikim silt loam	0-6	9.0-19	7.9-9.0	5-10	0	4.0-8.0	0-12
	6-60	8.0-20	8.5-9.0	5-10	0	2.0-8.0	5-12
238:							
Milok	0-4	4.0-14	7.9-8.4	3-10	0	0.0-2.0	0
	4-15	5.0-13	7.9-8.4	5-15	0	0.0-2.0	0-5
	15-37	5.0-13	7.9-9.0	10-20	0	0.0-2.0	0-5
	37-50	5.0-13	7.9-9.0	5-10	0	0.0-2.0	0-5
	50-60	3.0-12	8.5-9.0	5-10	0	0.0-2.0	0-5

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
239:							
Milok	0-4	4.0-14	7.9-8.4	3-10	0	0.0-2.0	0
	4-15	5.0-13	7.9-8.4	5-15	0	0.0-2.0	0-5
	15-37	5.0-13	7.9-9.0	10-20	0	0.0-2.0	0-5
	37-50	5.0-13	7.9-9.0	5-10	0	0.0-2.0	0-5
	50-60	3.0-12	8.5-9.0	5-10	0	0.0-2.0	0-5
Solirec	0-8	5.0-15	7.4-8.4	0-25	0	0	0
	8-52	4.0-20	7.9-9.0	15-40	0	0	0
	52-60	2.0-20	7.9-9.0	15-40	0	0	0
Strych	0-5	5.0-15	7.4-8.4	0-25	0	0	0
	5-10	2.0-15	7.4-9.0	15-40	0	0	0
	10-34	2.0-15	7.9-9.0	15-40	0	0	0
	34-50	2.0-15	7.9-9.0	15-40	0	0	0
	50-60	0.0-15	7.4-9.0	10-40	0	0	0
240:							
Milok	0-6	3.0-8.0	7.9-8.4	1-10	0	0	0
	6-12	6.0-12	7.9-9.0	1-10	0-1	0	0-5
	12-37	5.0-11	7.9-9.0	10-20	0-1	0	0-5
	37-44	4.0-10	7.9-9.0	1-10	0-2	0	0-5
	44-60	4.0-10	7.9-9.0	1-10	0-2	0	0-5
Strych	0-8	4.0-10	7.4-8.4	5-25	0	0	0
	8-39	3.0-9.0	7.9-8.4	15-40	0	0	0
	39-60	1.0-6.0	7.9-8.4	10-30	0	0	0
241:							
Pensore	0-3	5.0-15	7.4-8.4	0-25	0	0	0
	3-10	2.0-15	7.4-9.0	10-40	0	0	0
	10-16	1.0-10	7.9-9.0	40-60	0	0	0
	16-20	---	---	---	---	---	---
Roto	0-2	4.0-15	7.4-8.4	0-20	0	0	0
	2-9	2.0-15	7.9-9.0	10-40	0	0	0
	9-22	2.0-15	7.9-9.0	40-60	0	0	0
	22-26	---	---	---	---	---	---
242:							
Riverwash	0-6	---	---	---	---	0	---
	6-60	---	---	---	---	0	---
243:							
Rizno	0-5	4.0-10	7.4-8.4	10-25	0	0	0
	5-15	2.0-10	7.9-9.0	15-40	0	0	0
	15-19	---	---	---	---	---	---
Windcomb	0-4	8.0-18	7.9-8.4	1-10	0-1	0.0-2.0	0
	4-17	5.0-12	7.9-8.4	1-10	1-5	0.0-2.0	0
	17-21	---	---	---	---	---	---
Anasazi	0-3	4.0-15	7.4-8.4	0-15	0	0	0
	3-10	2.0-10	7.9-9.0	10-30	0	0	0
	10-19	2.0-10	7.9-9.0	15-40	0	0	0
	19-24	0.0-10	7.9-9.0	15-40	0	0	0
	24-28	---	---	---	---	---	---
244:							
Rock outcrop	0-60	---	---	---	---	---	---

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
244:							
Hackling	0-1	5.0-10	7.4-7.8	1-10	0	0	0
	1-4	5.0-15	7.4-8.4	1-10	0	0	0
	4-15	5.0-10	7.4-8.4	1-10	0	0	0
	15-19	---	---	---	---	---	---
245:							
Rock outcrop	0-60	---	---	---	---	---	---
Torriorthents	0-4	3.0-25	6.6-8.4	0-40	0	0	0
	4-18	1.0-30	7.4-9.0	0-50	0	0	0
	18-22	---	---	---	---	---	---
Ustorthents	0-6	5.0-20	6.6-8.4	0-5	0	0	0
	6-33	10-20	6.6-9.0	0-5	0	0	0
	33-37	---	---	---	---	---	---
246:							
Schoonover	0-3	5.0-20	7.4-8.4	5-10	0	0.0-2.0	0
	3-8	5.0-15	7.9-9.0	10-20	0	0.0-2.0	0
	8-11	4.0-15	7.9-9.0	15-40	0	0.0-2.0	0
	11-14	---	---	---	---	---	---
Duffymont	0-13	7.0-14	6.6-7.3	0	0	0.0-2.0	0
	13-17	6.0-15	6.6-7.8	0	0	0.0-2.0	0
	17-21	---	---	---	---	---	---
247:							
Stout	0-2	3.0-10	6.6-7.3	0	0	0	0
	2-11	2.0-10	6.6-7.3	0	0	0	0
	11-15	---	---	---	---	---	---
Rock outcrop	0-60	---	---	---	---	---	---
248:							
Strych	0-5	5.0-15	7.4-8.4	0-25	0	0	0
	5-10	2.0-15	7.4-9.0	15-40	0	0	0
	10-34	2.0-15	7.9-9.0	15-40	0	0	0
	34-50	2.0-15	7.9-9.0	15-40	0	0	0
	50-60	0.0-15	7.4-9.0	10-40	0	0	0
Mellenthin	0-2	3.0-10	7.4-8.4	5-25	0	0	0
	2-12	1.0-10	7.9-9.0	15-40	0	0	0
	12-16	---	---	---	---	---	---
249:							
Zillion	0-7	10-20	7.4-7.8	0	0	0	0
	7-18	10-20	7.4-7.8	0	0	0	0
	18-26	10-20	7.4-7.8	0	0	0	0
	26-34	10-20	7.4-7.8	5-15	0	0	0
	34-60	5.0-15	7.9-8.4	15-40	0	0	0
Yampa	0-7	4.0-10	7.4-8.4	5-20	0	0.0-2.0	0
	7-13	2.0-10	7.9-9.0	20-35	0	0.0-2.0	0
	13-31	4.0-15	7.9-9.0	30-40	0	0.0-2.0	0-1
	31-60	1.0-5.0	7.9-9.0	10-20	0	2.0-4.0	0-1
Clyl	0-2	8.0-20	7.4-8.4	0-5	0	0	0
	2-9	9.0-20	7.4-8.4	5-10	0	0	0
	9-19	8.0-15	7.9-8.4	40-60	0	0.0-2.0	0
	19-29	8.0-15	7.9-8.4	40-60	0	0.0-2.0	0
	29-60	8.0-15	7.9-8.4	40-60	0	0.0-2.0	0

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
250:							
Abracon	0-4	8.0-20	7.9-9.0	5-20	0	0.0-2.0	0-5
	4-10	7.0-15	7.9-9.0	5-25	0	0.0-2.0	0-5
	10-51	6.0-15	7.9-9.0	15-40	0	0.0-2.0	5-10
	51-60	6.0-12	7.9-9.0	5-25	0	0.0-2.0	5-10
251:							
Badland	0-2	---	7.9-11.0	5-15	1-10	4.0-20.0	5-30
	2-12	---	---	---	---	---	---
Renegade	0-4	5.0-20	7.4-8.4	1-10	0	0.0-2.0	0
	4-15	5.0-20	7.4-8.4	1-10	0	0.0-2.0	0
	15-47	4.0-15	7.4-8.4	1-10	0	0.0-2.0	0
	47-58	3.0-15	7.4-8.4	1-10	0	0.0-2.0	0
	58-62	---	---	---	---	---	---
252:							
Bigtom	0-1	---	5.1-6.5	---	---	---	---
	1-7	10-20	6.6-7.8	0	0	0	0
	7-12	5.0-20	6.6-7.8	0	0	0	0
	12-41	15-25	6.6-7.8	0	0	0	0
	41-61	10-25	6.6-7.8	0	0	0	0
Namlot	0-3	5.0-15	6.6-7.8	0	0	0	0
	3-7	10-20	6.6-7.8	0	0	0	0
	7-17	10-20	6.6-7.8	0	0	0	0
	17-21	---	---	---	---	---	---
Dokie	0-4	---	5.1-6.5	---	---	---	---
	4-7	10-25	6.6-7.3	0	0	0	0
	7-16	10-25	6.6-7.3	0	0	0	0
	16-36	10-20	6.6-7.3	0	0	0	0
	36-64	5.0-15	6.6-7.3	0	0	0	0
253:							
Clapper	0-7	10-20	7.9-9.0	5-15	0	0.0-2.0	0-5
	7-13	10-20	7.9-9.0	20-40	0	0.0-2.0	0-5
	13-36	10-20	7.9-9.0	20-40	0	0.0-2.0	0-10
	36-49	10-20	7.9-9.0	20-40	0	0.0-2.0	0-10
	49-60	10-20	7.9-9.0	15-40	0	0.0-2.0	0-10
254:							
Cliff	0-4	5.0-15	7.9-9.0	1-10	0	0.0-4.0	5-13
	4-60	1.0-10	7.9-9.0	4-15	0	0.0-4.0	5-13
255:							
Clyl	0-2	10-20	7.4-8.4	1-5	0	0	0
	2-9	5.0-15	7.4-8.4	1-10	0	0	0
	9-19	5.0-15	7.9-8.4	30-60	0	0.0-2.0	0
	19-29	5.0-15	7.9-8.4	40-60	0	0.0-2.0	0
	29-60	4.0-15	7.9-8.4	40-60	0	0.0-2.0	0
Pinerid	0-2	10-25	7.9-8.4	20-40	0	0.0-2.0	0
	2-6	5.0-20	7.9-8.4	30-50	0	0.0-2.0	0
	6-13	5.0-20	7.9-8.4	50-60	0	0.0-2.0	0
	13-17	---	---	---	---	---	---

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
256:							
Cortyzack	0-3	12-24	6.6-7.8	0	0	0	0
	3-12	15-27	7.4-7.8	0	0	0	0
	12-23	13-23	7.4-8.4	0	0	0	0
	23-48	11-20	7.9-8.4	15-30	0	0	0
	48-72	7.0-16	7.9-8.4	5-15	0	0	0
	72-76	7.0-16	7.9-8.4	1-10	0	0	0
Diagulch	0-9	10-25	6.6-8.4	0	0	0	0
	9-34	10-20	7.9-8.4	15-30	0	0.0-2.0	0
	34-53	4.0-15	7.9-8.4	10-20	0	0.0-2.0	0
	53-60	3.0-10	7.9-8.4	5-15	0	0.0-2.0	0
257:							
Cortyzack	0-3	12-24	6.6-7.8	0	0	0	0
	3-12	15-27	7.4-7.8	0	0	0	0
	12-23	13-23	7.4-8.4	0	0	0	0
	23-48	11-20	7.9-8.4	15-30	0	0	0
	48-72	7.0-16	7.9-8.4	5-15	0	0	0
	72-76	7.0-16	7.9-8.4	1-10	0	0	0
Duffymont	0-13	7.0-14	6.6-7.3	0	0	0.0-2.0	0
	13-17	6.0-15	6.6-7.8	0	0	0.0-2.0	0
	17-21	---	---	---	---	---	---
258:							
Cortyzack	0-3	12-24	6.6-7.8	0	0	0	0
	3-12	15-27	7.4-7.8	0	0	0	0
	12-23	13-23	7.4-8.4	0	0	0	0
	23-48	11-20	7.9-8.4	15-30	0	0	0
	48-72	7.0-16	7.9-8.4	5-15	0	0	0
	72-76	7.0-16	7.9-8.4	1-10	0	0	0
Flynncove	0-8	10-25	6.6-7.8	0	0	0	0
	8-15	15-25	6.6-7.8	0	0	0	0
	15-37	15-25	6.6-7.8	0	0	0	0
	37-60	5.0-15	7.4-8.4	0	0	0	0
259:							
Denco	0-4	10-25	7.9-9.0	3-10	0	0.0-4.0	0-5
	4-37	15-30	7.9-9.0	3-15	1-5	0.0-4.0	0-5
	37-41	---	---	---	---	---	---
Gerst	0-2	5.0-20	7.9-9.0	5-30	0	0.0-2.0	0
	2-12	5.0-15	7.9-9.0	5-40	0-1	0.0-2.0	0-5
	12-22	---	---	---	---	---	---
260:							
Dokie	0-4	---	5.1-6.5	---	---	---	---
	4-7	10-25	6.6-7.3	0	0	0	0
	7-16	10-25	6.6-7.3	0	0	0	0
	16-36	10-20	6.6-7.3	0	0	0	0
	36-64	5.0-15	6.6-7.3	0	0	0	0
Flynncove	0-8	10-20	6.6-7.8	0	0	0	0
	8-13	10-15	6.6-7.8	0	0	0	0
	13-40	15-25	6.6-7.8	0	0	0	0
	40-60	10-25	7.4-8.4	0	0	0	0

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
261:							
Dokie	0-4	---	5.1-6.5	---	---	---	---
	4-7	10-25	6.6-7.3	0	0	0	0
	7-16	10-25	6.6-7.3	0	0	0	0
	16-36	10-20	6.6-7.3	0	0	0	0
	36-64	5.0-15	6.6-7.3	0	0	0	0
Namlot	0-3	5.0-15	6.6-7.8	0	0	0	0
	3-7	10-20	6.6-7.8	0	0	0	0
	7-17	10-20	6.6-7.8	0	0	0	0
	17-21	---	---	---	---	---	---
262:							
Gompers	0-3	10-20	7.9-8.4	15-30	0	0.0-2.0	0-5
	3-8	10-20	7.9-9.0	15-30	0	0.0-2.0	5-10
	8-18	4.0-15	7.9-9.0	15-30	0	0.0-2.0	5-10
	18-22	---	---	---	---	---	---
263:							
Hanksville	0-3	15-25	7.9-9.0	5-25	1-10	2.0-8.0	2-5
	3-33	15-30	7.9-9.0	5-25	5-10	2.0-16.0	2-13
	33-37	---	---	---	---	---	---
264:							
Mikim	0-6	10-20	7.9-8.4	5-10	0	0.0-2.0	0
	6-60	5.0-20	8.5-9.0	5-15	0-2	0.0-2.0	0-10
265:							
Mikim	0-6	9.0-19	8.5-9.0	5-10	0	4.0-8.0	10-15
	6-60	8.0-20	8.5-9.0	5-10	0-2	2.0-8.0	10-15
266:							
Rock outcrop	0-60	---	---	---	---	---	---
Boxring	0-6	5.0-15	7.9-8.4	0	0	0	0
	6-14	10-20	7.9-8.4	0	0	0	0
	14-18	---	---	---	---	---	---
Tridell	0-2	10-20	7.4-8.4	1-10	0	0	0-5
	2-8	10-20	7.9-8.4	5-15	0	0	0-5
	8-37	5.0-15	7.9-8.4	15-40	0	0	0-5
	37-60	5.0-15	7.9-9.0	15-40	0	0.0-2.0	0-5
267:							
Solirec	0-4	5.0-10	7.4-8.4	0	0	0.0-2.0	0
	4-12	10-20	7.4-8.4	0	0	0.0-2.0	0
	12-19	5.0-15	7.9-8.4	15-25	0	0.0-2.0	0
	19-75	10-20	7.9-9.0	20-35	0	0.0-2.0	0-5
Abracon	0-2	8.0-20	7.9-9.0	5-20	0	0.0-2.0	0-5
	2-16	7.0-15	7.9-9.0	5-25	0	0.0-2.0	0-5
	16-51	6.0-15	7.9-9.0	15-40	0	0.0-2.0	5-10
	51-60	6.0-12	7.9-9.0	5-25	0	0.0-2.0	5-10
Begay	0-4	2.0-7.0	7.9-8.4	0-3	0-2	0	1-10
	4-12	5.0-10	7.9-8.4	0-3	0-2	0.0-2.0	1-10
	12-37	4.0-10	7.9-8.4	1-5	0-2	0.0-2.0	1-10
	37-60	4.0-10	7.9-9.0	0-5	0-2	0.0-2.0	1-10

Table 22.--Chemical properties of the soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In.	meq/100 g	pH	Pct.	Pct.	mmhos/cm.	
268:							
Toliver	0-7	5.0-20	7.9-8.4	1-10	0	0.0-2.0	0
	7-19	4.0-15	7.9-8.4	1-10	0	0.0-2.0	0
	19-59	1.0-10	7.9-8.4	1-10	0	0.0-2.0	0
	59-63	---	---	---	---	---	---
Rock outcrop	0-60	---	---	---	---	---	---
269:							
Walknolls	0-2	4.0-15	7.9-8.4	5-10	0	0.0-2.0	0-5
	2-7	4.0-15	7.9-9.0	15-30	0	0.0-2.0	5-10
	7-14	4.0-15	7.9-9.0	15-30	0	0.0-2.0	5-10
	14-18	---	---	---	---	---	---
Badland	0-2	---	7.9-11.0	5-15	1-10	4.0-20.0	5-30
	2-12	---	---	---	---	---	---
Rock outcrop	0-60	---	---	---	---	---	---
270:							
Walknolls	0-3	5.0-15	7.9-9.0	5-10	0	0.0-2.0	0-10
	3-7	5.0-20	7.9-9.0	15-30	0	0.0-2.0	0-10
	7-16	5.0-15	7.9-9.0	15-30	0	0.0-2.0	5-10
	16-20	---	---	---	---	---	---
Gilston	0-4	3.0-15	7.9-8.4	1-10	0	0.0-2.0	0
	4-52	3.0-15	7.9-9.0	1-10	0	0.0-2.0	5-13
	52-68	4.0-10	7.9-11.0	10-20	15-40	4.0-16.0	30-55
271:							
Water	---	---	---	---	---	---	---

Table 23.--Soil features

(See text for definitions of terms used in this table. Absence of an entry indicates that the feature is not a concern or that data were not estimated.)

Map symbol and soil name	Restrictive layer		Potential for frost action	Risk of corrosion	
	Kind	Depth to top		Uncoated steel	Concrete
		In.			
1:					
Abor	Bedrock (paralithic)	20-40	Low	High	Moderate
2:					
Abor	Bedrock (paralithic)	20-40	Low	High	Moderate
3:					
Adderton	---	---	Moderate	Moderate	Low
4:					
Almy	---	---	Low	High	Low
5:					
Apmay	---	---	Moderate	Moderate	Low
6:					
Avalon	---	---	Low	High	High
Mack	---	---	Low	High	Moderate
7:					
Avalon	Bedrock (paralithic)	40-60	Low	High	Moderate
Persayo, moist	Bedrock (paralithic)	10-20	Low	Moderate	Low
Degater	Bedrock (paralithic)	20-40	Low	High	Moderate
8:					
Badland	Bedrock (paralithic)	0-3	None	---	---
9:					
Baroid	---	---	Low	High	Low
Eghelm	---	---	Low	High	High
10:					
Battlement	---	---	Low	High	Low
11:					
Battlement, saline	---	---	Low	High	High
12:					
Berlake	---	---	Moderate	Moderate	Low
13:					
Berlake	---	---	Moderate	Moderate	Low
14:					
Berlake	---	---	Moderate	Moderate	Low
Maysprings	---	---	Low	Moderate	Low
15:					
Berlake	---	---	Low	Low	Low

Table 23.--Soil features--Continued

Map symbol and soil name	Restrictive layer		Potential for frost action	Risk of corrosion	
	Kind	Depth to top		Uncoated steel	Concrete
		In.			
15:					
Taffom	---	---	Low	Low	Low
Gretdivid	---	---	Low	Moderate	Low
16:					
Bilhil	---	---	Low	High	Low
17:					
Binco	---	---	Moderate	High	Moderate
18:					
Boltus	Bedrock (paralithic)	10-20	Low	High	High
Beamton	Bedrock (paralithic)	20-40	Low	High	High
19:					
Borollic Natrargids	---	---	Low	High	High
Borollic Haplargids	---	---	Low	Low	Low
Ustic Torrifluvents	---	---	Moderate	Moderate	Low
20:					
Brownsto	---	---	Low	High	Moderate
Castee	---	---	Low	High	Moderate
21:					
Bulkley	---	---	Low	High	Low
22:					
Bulkley	---	---	Low	High	Moderate
23:					
Bulkley	---	---	Low	High	Moderate
24:					
Bulkley	---	---	Low	High	Moderate
Quilt	---	---	Low	High	Low
25:					
Campspass	---	---	Moderate	High	Low
26:					
Campspass	---	---	Moderate	High	Low
27:					
Canlodore	---	---	Low	Moderate	Moderate
28:					
Carbol	Bedrock (lithic)	10-20	Low	Low	Low
Irigul	Bedrock (lithic)	10-20	Low	Moderate	Low
Rock outcrop	Bedrock (lithic)	0-0	None	---	---
29:					
Carbol	Bedrock (lithic)	10-20	Low	Low	Low
Miracle	Bedrock (lithic)	20-40	Moderate	High	Low

Table 23.--Soil features--Continued

Map symbol and soil name	Restrictive layer		Potential for frost action	Risk of corrosion	
	Kind	Depth to top		Uncoated steel	Concrete
		In.			
30:					
Carmody	Bedrock (paralithic)	20-40	Low	High	Low
Rock River	---	---	Low	High	Low
Crestman	Bedrock (paralithic)	10-20	Low	Moderate	Low
31:					
Castee	---	---	Low	High	Moderate
32:					
Chroder	---	---	Low	High	Low
33:					
Clayburn, warm	---	---	Moderate	Moderate	Low
34:					
Clayburn	---	---	Moderate	Moderate	Low
Foidel	---	---	Moderate	Moderate	Moderate
35:					
Clayburn	---	---	Moderate	Moderate	Low
Youga, moist	---	---	Moderate	Moderate	Low
36:					
Clifsand	---	---	Low	High	Moderate
Chroder	---	---	Low	High	Low
37:					
Cochetopa	---	---	Low	Moderate	Low
38:					
Cochetopa	---	---	Low	Moderate	Low
39:					
Cochetopa, warm	---	---	Low	Moderate	Low
40:					
Cochetopa	---	---	Low	Moderate	Low
Gothic	---	---	Low	High	Low
41:					
Cochetopa	---	---	Low	Moderate	Low
Gothic	---	---	Low	High	Low
42:					
Cochetopa	---	---	Low	Moderate	Low
Jerry	---	---	Low	Moderate	Low
43:					
Coldspring, moist	Bedrock (lithic)	40-60	Moderate	Moderate	Low
44:					
Cowestglen	---	---	Low	High	Moderate

Table 23.--Soil features--Continued

Map symbol and soil name	Restrictive layer		Potential for frost action	Risk of corrosion	
	Kind	Depth to top		Uncoated steel	Concrete
		In.			
45:					
Coyet	---	---	Low	Low	Low
46:					
Coyet	---	---	Low	Low	Low
47:					
Coyet	Bedrock (paralithic)	40-60	Low	Low	Low
Crestman, moist	Bedrock (paralithic)	10-20	Low	Moderate	Low
48:					
Crago	---	---	Low	High	High
Pensore	Bedrock (lithic)	10-20	Low	Moderate	Low
Grapit	---	---	Low	Moderate	Low
49:					
Cryoborolls, slumped	---	---	Moderate	Moderate	Low
50:					
Cushool	Bedrock (paralithic)	20-40	Low	High	Low
51:					
Cushool	Bedrock (paralithic)	20-40	Low	High	Low
52:					
Danavore	Bedrock (paralithic)	20-40	Moderate	Moderate	Low
Waybe	Bedrock (paralithic)	10-20	Moderate	High	Low
53:					
Davtone	---	---	Moderate	Moderate	Low
Forsey	---	---	Moderate	Moderate	Low
54:					
Deaver	Bedrock (paralithic)	20-40	Low	High	High
Avalon	---	---	Low	High	High
55:					
Deaver	Bedrock (paralithic)	20-40	Low	High	High
Chipeta	Bedrock (paralithic)	5-20	Low	High	High
56:					
Debone	---	---	Low	High	Low
57:					
Detra	---	---	Moderate	Moderate	Low
Cortyzack	---	---	Moderate	Moderate	Low

Table 23.--Soil features--Continued

Map symbol and soil name	Restrictive layer		Potential for frost action	Risk of corrosion	
	Kind	Depth to top		Uncoated steel	Concrete
		In.			
58:					
Diaflats	Bedrock (lithic)	20-40	Low	High	Low
Fondillas	Bedrock (lithic)	10-20	Low	High	Low
59:					
Dranyon	---	---	Moderate	Moderate	Low
60:					
Dumps, mine	---	---	None	---	---
61:					
Ecklund	Bedrock (lithic)	20-40	Low	High	Low
Tipperary	---	---	Low	High	Low
62:					
Eghelm	---	---	Low	High	Moderate
63:					
Eghelm, moist	---	---	Low	High	Moderate
64:					
Emlin	---	---	Low	High	Moderate
65:					
Emlin	---	---	Low	High	Moderate
Tymosling	Bedrock (paralithic)	25-40	Low	High	Low
66:					
Evanot	---	---	Low	High	Low
67:					
Evanot	---	---	Low	High	Low
68:					
Evanot	---	---	Low	High	Low
Yamo	---	---	Moderate	High	Low
69:					
Fenster	---	---	Low	High	Moderate
Thenipel	---	---	Low	Moderate	Low
70:					
Fluvaquents, frequently flooded	---	---	High	High	Low
Haplaquolls, frequently flooded	---	---	High	High	Low
71:					
Flygare, dry	---	---	Moderate	Moderate	Low
72:					
Foidel, cool	---	---	Moderate	Moderate	Low
73:					
Foidel	---	---	Moderate	Moderate	Low

Table 23.--Soil features--Continued

Map symbol and soil name	Restrictive layer		Potential for frost action	Risk of corrosion	
	Kind	Depth to top		Uncoated steel	Concrete
		In.			
74:					
Foidel, moist	---	---	Moderate	Moderate	Low
Flygare	---	---	Moderate	Moderate	Low
Skyway, moist	Bedrock (lithic)	20-40	High	High	Low
75:					
Fonce	---	---	Low	High	Moderate
76:					
Fonce	---	---	Low	Moderate	Low
77:					
Forelle	---	---	Low	High	Low
78:					
Forelle	---	---	Low	High	Low
79:					
Forelle	---	---	Low	High	Low
Evanot	---	---	Low	High	Low
80:					
Forelle	---	---	Low	High	Low
Evanot	---	---	Low	High	Low
81:					
Forelle	---	---	Low	High	Low
Obadia	---	---	Low	High	High
82:					
Forelle	---	---	Low	High	Low
Pinelli	---	---	Low	Moderate	Low
Maysprings	---	---	Low	Moderate	Low
83:					
Forsey	---	---	Moderate	Moderate	Low
Libeg	---	---	Moderate	Moderate	Moderate
84:					
Gebson, moist	---	---	Moderate	Moderate	Low
Youga	---	---	Moderate	Moderate	Low
85:					
Giarch	---	---	Low	High	High
86:					
Gracot	---	---	Low	Moderate	Low
Maybell	---	---	Low	Moderate	Low
87:					
Gretdivid	---	---	Low	Moderate	Low
Taffom	---	---	Low	Low	Low

Table 23.--Soil features--Continued

Map symbol and soil name	Restrictive layer		Potential for frost action	Risk of corrosion	
	Kind	Depth to top		Uncoated steel	Concrete
		In.			
87:					
Abor	Bedrock (paralithic)	20-40	Low	High	Moderate
88:					
Grieves	---	---	Low	High	Low
89:					
Grieves	---	---	Low	High	Low
90:					
Grieves	---	---	Low	High	Low
Crestman	Bedrock (paralithic)	10-20	Low	Moderate	Low
91:					
Grieves	---	---	Low	High	Low
Yamo	---	---	Moderate	High	Low
Crestman	Bedrock (paralithic)	10-20	Low	Moderate	Low
92:					
Grimm	---	---	Low	Moderate	Low
Ustic Torriorthents, shallow	Bedrock (paralithic)	7-20	Moderate	Moderate	Low
93:					
Gullied land	---	---	None	---	---
94:					
Hapney, moist	---	---	Moderate	High	High
95:					
Haterton	Bedrock (paralithic)	7-20	Low	High	High
Piezon	Bedrock (paralithic)	20-40	Low	Moderate	Low
96:					
Heathcoat	---	---	Low	High	Low
97:					
Heathcoat	---	---	Low	High	Low
Clayburn	---	---	Moderate	Moderate	Low
98:					
Herm	---	---	Low	Moderate	Low
Fughes	---	---	Low	Moderate	Low
99:					
Hesperus, dry	---	---	Moderate	Moderate	Low
100:					
Hesperus	---	---	Moderate	Moderate	Low

Table 23.--Soil features--Continued

Map symbol and soil name	Restrictive layer		Potential for frost action	Risk of corrosion	
	Kind	Depth to top		Uncoated steel	Concrete
		In.			
101:					
Hesperus	---	---	Moderate	Moderate	Low
102:					
Holter	---	---	Moderate	Moderate	Low
Detra	---	---	Moderate	Moderate	Low
103:					
Iles	---	---	Moderate	High	Low
104:					
Ironco	---	---	Moderate	Moderate	Low
Mulgon, dry	---	---	Moderate	Moderate	Moderate
105:					
Ironsprings	---	---	Low	Moderate	Low
106:					
Ironsprings	---	---	Low	Moderate	Low
107:					
Ironsprings	---	---	Low	Moderate	Low
Maysprings	---	---	Low	Moderate	Low
Gretdivid	---	---	Low	Moderate	Low
108:					
Jerry	---	---	Low	High	Low
Cochetopa	---	---	Low	Moderate	Low
109:					
Joebas	Bedrock (lithic)	10-20	Low	Low	Low
Rock outcrop	Bedrock (lithic)	0-0	None	---	---
110:					
Kemmerer	Bedrock (paralithic)	20-40	Low	High	Moderate
111:					
Kemmerer	Bedrock (paralithic)	20-40	Low	High	Moderate
Grapit	---	---	Low	Moderate	Low
112:					
Kemmerer	Bedrock (paralithic)	20-40	Low	High	Moderate
Moyerson	Bedrock (paralithic)	10-20	Low	High	High
113:					
Kemmerer	Bedrock (paralithic)	20-40	Low	High	Moderate
Yamo	---	---	Moderate	High	Low
114:					
Lamphier	---	---	Moderate	Moderate	Low

Table 23.--Soil features--Continued

Map symbol and soil name	Restrictive layer		Potential for frost action	Risk of corrosion	
	Kind	Depth to top		Uncoated steel	Concrete
		In.			
115:					
Lamphier	---	---	Moderate	Moderate	Low
116:					
Lamphier	---	---	Moderate	Moderate	Low
Jerry	---	---	Low	High	Low
117:					
Lamphier	---	---	Moderate	Moderate	Low
Jerry	---	---	Low	High	Low
118:					
Lander	---	---	Moderate	High	Low
119:					
Langspring	---	---	Moderate	High	Low
120:					
Layoint	Bedrock (lithic)	24-40	Low	Moderate	Low
Moosed	Bedrock (lithic)	7-20	Low	Moderate	Low
Berlake	---	---	Low	Low	Low
121:					
Leaps	---	---	Low	Moderate	Moderate
122:					
Leswill	---	---	Low	High	High
Rogrube	---	---	Low	High	High
123:					
Lilsnake	Bedrock (lithic)	10-20	Low	High	Low
Sandwash	Bedrock (lithic)	20-40	Low	High	Low
124:					
Losee	---	---	Moderate	Moderate	Low
Thornburgh, dry	---	---	Low	High	Low
125:					
Massadona	---	---	Low	High	High
126:					
Massadona	---	---	Low	High	High
Youngston, moist	---	---	Low	High	Moderate
127:					
Maudlin	Bedrock (lithic)	20-40	Moderate	Moderate	Low
Duffymont	Bedrock (lithic)	4-20	Moderate	Moderate	Low
128:					
Maybell	---	---	Low	Moderate	Low
129:					
Maybell	---	---	Low	Moderate	Low

Table 23.--Soil features--Continued

Map symbol and soil name	Restrictive layer		Potential for frost action	Risk of corrosion	
	Kind	Depth to top		Uncoated steel	Concrete
		In.			
130:					
Maysprings	---	---	Low	Moderate	Low
131:					
Maysprings	---	---	Low	Moderate	Low
Gretdivid	---	---	Low	Moderate	Low
132:					
Milren	---	---	Low	High	Moderate
133:					
Miracle	Bedrock (lithic)	20-40	Moderate	High	Low
Coldspring	Bedrock (lithic)	40-60	Moderate	Moderate	Low
134:					
Morapos	---	---	Low	High	Low
135:					
Morapos	---	---	Low	High	Low
136:					
Morapos	---	---	Low	High	Low
Pagoda	---	---	Low	Moderate	Low
137:					
Morset	---	---	Moderate	High	Low
Youga	---	---	Moderate	Moderate	Low
138:					
Moyerson	Bedrock (paralithic)	10-20	Low	High	High
Rentsac	Bedrock (lithic)	10-20	Moderate	High	Low
139:					
Muggins	---	---	Moderate	Moderate	Moderate
140:					
Ninot	---	---	Low	High	Moderate
Crago	---	---	Low	High	High
Garlips	---	---	Moderate	High	Moderate
141:					
Nortez, cool	Bedrock (lithic)	20-40	Low	Moderate	Low
Morapos	---	---	Low	High	Low
142:					
Nortez, cool	Bedrock (lithic)	20-40	Low	Moderate	Low
Morapos	---	---	Low	High	Low
143:					
Nunemaker	---	---	Low	High	High
144:					
Pagoda	---	---	Low	Moderate	Low

Table 23.--Soil features--Continued

Map symbol and soil name	Restrictive layer		Potential for frost action	Risk of corrosion	
	Kind	Depth to top		Uncoated steel	Concrete
		In.			
145:					
Pagoda	---	---	Low	Moderate	Low
146:					
Pavillion	Bedrock (paralithic)	20-40	Low	High	Moderate
Degater	Bedrock (paralithic)	20-40	Low	High	Moderate
147:					
Peeler	---	---	Moderate	Moderate	Moderate
148:					
Pilotpeak	Bedrock (lithic)	10-20	Low	Moderate	Low
Grubrob	Bedrock (lithic)	20-40	Low	Moderate	Low
149:					
Pinelli	---	---	Low	Moderate	Low
150:					
Pinelli	---	---	Low	Moderate	Low
151:					
Pinelli, dry	---	---	Low	Moderate	Low
152:					
Pinridge	---	---	Moderate	Moderate	Low
153:					
Pricecreek	---	---	Low	High	High
154:					
Quealman	---	---	Low	Moderate	Moderate
155:					
Rencot	Bedrock (lithic)	7-20	Moderate	High	Low
Duffymont	Bedrock (lithic)	4-20	Moderate	Moderate	Low
156:					
Rentsac	Bedrock (lithic)	10-20	Moderate	High	Low
157:					
Rentsac	Bedrock (lithic)	10-20	Moderate	High	Low
Moyerson	Bedrock (paralithic)	10-20	Low	High	High
158:					
Rock outcrop	Bedrock (lithic)	0-0	None	---	---
Earsman	Bedrock (lithic)	4-20	Low	Moderate	Low
159:					
Rock outcrop	Bedrock (lithic)	0-0	None	---	---
Haploborolls	Bedrock (lithic)	4-30	Moderate	Moderate	Low
160:					
Rock outcrop	Bedrock (lithic)	0-0	None	---	---
Torriorthents	Bedrock (lithic)	4-30	Moderate	Moderate	Low

Table 23.--Soil features--Continued

Map symbol and soil name	Restrictive layer		Potential for frost action	Risk of corrosion	
	Kind	Depth to top		Uncoated steel	Concrete
		In.			
161:					
Rock River	---	---	Low	High	Low
162:					
Rock River	---	---	Low	High	Low
163:					
Rock River	---	---	Low	High	Low
164:					
Rock River	---	---	Low	High	Low
Taffom	---	---	Low	Low	Low
165:					
Rogrube sandy loam	---	---	Low	High	High
Rogrube clay loam	---	---	Low	High	High
166:					
Routt	---	---	Moderate	Moderate	Moderate
167:					
Routt	---	---	Moderate	Moderate	Moderate
Cochetopa	---	---	Low	Moderate	Low
Binco	---	---	Moderate	High	Moderate
168:					
Ruedloff	---	---	Low	High	Low
169:					
Ruedloff	---	---	Low	High	Low
Dunul	---	---	Low	Moderate	Low
170:					
Ryan Park	---	---	Low	Moderate	Low
171:					
Ryan Park	---	---	Low	Moderate	Low
172:					
Ryan Park	---	---	Low	Moderate	Low
Coyet	---	---	Low	Low	Low
173:					
Ryark	---	---	Low	Moderate	Low
Powderwash	Bedrock (paralithic)	30-40	Low	High	Low
174:					
Ryark	---	---	Low	Moderate	Low
Maybell	---	---	Low	Moderate	Low
175:					
Sandwash	Bedrock (lithic)	20-40	Low	High	Low
Langspring	---	---	Moderate	High	Low

Table 23.--Soil features--Continued

Map symbol and soil name	Restrictive layer		Potential for frost action	Risk of corrosion	
	Kind	Depth to top		Uncoated steel	Concrete
		In.			
175:					
Baston	Bedrock (paralithic)	20-40	Moderate	High	Low
176:					
Schooner	Bedrock (lithic)	10-20	Low	High	Low
Rock outcrop	Bedrock (lithic)	0-0	None	---	---
177:					
Schooner	Bedrock (lithic)	10-20	Low	High	Low
Tricera	---	---	Low	Low	Low
178:					
Simanni	---	---	Low	High	Moderate
Ruedloff	---	---	Low	High	Low
179:					
Skyway, dry	Bedrock (lithic)	20-40	High	High	Low
180:					
Spool	Bedrock (lithic)	10-20	Low	Moderate	Low
Maybell	---	---	Low	Moderate	Low
181:					
Stunner	---	---	Low	High	Low
182:					
Stunner, moist	---	---	Low	High	Moderate
Emlin	---	---	Low	High	Moderate
183:					
Styers	Bedrock (paralithic)	20-40	Low	High	Moderate
Ironsprings	---	---	Low	Moderate	Low
Maysprings	---	---	Low	Moderate	Low
184:					
Styers	Bedrock (paralithic)	20-40	Low	High	Moderate
Pinelli	---	---	Low	Moderate	Low
Taffom	---	---	Low	Low	Low
185:					
Taffom	---	---	Low	Low	Low
186:					
Talamantes	---	---	Low	High	Moderate
187:					
Talamantes	---	---	Low	High	Moderate
188:					
Talamantes, saline	---	---	Low	High	High

Table 23.--Soil features--Continued

Map symbol and soil name	Restrictive layer		Potential for frost action	Risk of corrosion	
	Kind	Depth to top		Uncoated steel	Concrete
		In.			
189:					
Tipper	Bedrock (paralithic)	20-40	Low	High	Low
Crustown	Bedrock (paralithic)	10-20	Low	High	Low
190:					
Tipperary	---	---	Low	High	Low
191:					
Tipperary	---	---	Low	High	Low
192:					
Tipperary	---	---	Low	High	Low
Willwood	---	---	Low	High	Moderate
193:					
Tisworth	---	---	Low	High	High
194:					
Tolman	Bedrock (lithic)	10-20	Moderate	Moderate	Low
Duffymont	Bedrock (lithic)	4-20	Moderate	Moderate	Low
195:					
Torriorthents	Bedrock (paralithic)	4-30	Low	High	High
	Bedrock (lithic)	4-30			
196:					
Torriorthents	Bedrock (paralithic)	4-30	Low	High	High
Baston	Bedrock (paralithic)	20-40	Moderate	High	Low
197:					
Torriorthents	Bedrock (paralithic)	4-30	Moderate	Moderate	Low
	Bedrock (lithic)	4-30			
Rock outcrop, sandstone	Bedrock (lithic)	0-0	None	---	---
198:					
Torriorthents	Bedrock (paralithic)	4-30	Low	High	High
Rock outcrop, shale	Bedrock (paralithic)	0-0	None	---	---
199:					
Torriorthents	Bedrock (paralithic)	4-30	Moderate	Moderate	Low
	Bedrock (lithic)	4-30			

Table 23.--Soil features--Continued

Map symbol and soil name	Restrictive layer		Potential for frost action	Risk of corrosion	
	Kind	Depth to top		Uncoated steel	Concrete
		In.			
199:					
Torripsamments	Bedrock (lithic)	20-80	Low	Moderate	Low
	Bedrock (paralithic)	20-80			
200:					
Tresano	---	---	Low	High	Low
201:					
Tresano	---	---	Low	High	Low
Hiatha	Bedrock (paralithic)	10-20	Low	Moderate	High
Kandaly	---	---	Low	High	Low
202:					
Turzo	---	---	Low	High	Moderate
203:					
Turzo, saline	---	---	Low	High	High
204:					
Typic Natrargids	---	---	Low	High	High
205:					
Uffens	---	---	Low	High	High
206:					
Ustorthents, frigid	Bedrock (paralithic)	10-30	Moderate	Moderate	Low
	Bedrock (lithic)	10-30			
Borolls	Bedrock (paralithic)	20-80	Moderate	Moderate	Low
	Bedrock (lithic)	20-80			
207:					
Vermillion	Bedrock (lithic)	20-40	Low	High	Low
Langspring	---	---	Moderate	High	Low
208:					
Wallson	---	---	Low	Moderate	Low
Tricera	---	---	Low	Low	Low
209:					
Weed	---	---	Low	High	Low
210:					
Willwood	---	---	Low	High	Moderate
Sheppard, cool	---	---	Low	Moderate	Low
211:					
Willwood	---	---	Low	High	Moderate
Tipperary	---	---	Low	High	Low

Table 23.--Soil features--Continued

Map symbol and soil name	Restrictive layer		Potential for frost action	Risk of corrosion	
	Kind	Depth to top		Uncoated steel	Concrete
		In.			
212:					
Willwood	---	---	Low	High	Moderate
Tipperary, cobbly substratum	---	---	Low	Moderate	Low
213:					
Winevada	Bedrock (lithic)	20-40	Moderate	Low	Low
Splitro	Bedrock (lithic)	10-20	Moderate	Moderate	Low
214:					
Winevada	Bedrock (lithic)	20-40	Moderate	Low	Low
Splitro	Bedrock (lithic)	10-20	Moderate	Moderate	Low
215:					
Winkleman	---	---	Low	High	High
216:					
Yamo	---	---	Moderate	High	Low
217:					
Yamo	---	---	Moderate	High	Low
218:					
Yellowwash	Bedrock (lithic)	7-20	Low	Moderate	Low
Piezon	Bedrock (paralithic)	20-40	Low	Moderate	Low
219:					
Youga	---	---	Moderate	Moderate	Low
220:					
Youga	---	---	Moderate	Moderate	Low
Dinnen	---	---	Moderate	Moderate	Low
221:					
Youga	---	---	Moderate	Moderate	Low
Gelkie	---	---	Moderate	Moderate	Low
Clayburn, warm	---	---	Moderate	Moderate	Low
222:					
Youngston, cool	---	---	Low	High	High
223:					
Youngston, well drained	---	---	Low	High	Moderate
224:					
Zillion	---	---	Moderate	Moderate	Low
Barkelew, moist	---	---	Low	High	Low
Grapit	---	---	Low	Moderate	Low
225:					
Abracon	---	---	Low	High	Moderate
Solirec	---	---	Low	High	Moderate

Table 23.--Soil features--Continued

Map symbol and soil name	Restrictive layer		Potential for frost action	Risk of corrosion	
	Kind	Depth to top		Uncoated steel	Concrete
		In.			
226:					
Arches	Bedrock (lithic)	5-20	Low	High	Moderate
Mespun	---	---	Low	Moderate	Low
Rock outcrop	Bedrock (lithic)	0-0	None	---	---
227:					
Bankard family	---	---	Low	Low	Low
Cameo	---	---	Moderate	Low	Low
228:					
Bondman	Bedrock (lithic)	7-20	Moderate	Low	Low
Rock outcrop	Bedrock (lithic)	0-0	None	---	---
229:					
Cameo	---	---	Moderate	Low	Low
230:					
Cragnot	---	---	Moderate	Low	Low
Pensore	Bedrock (lithic)	10-20	Low	Moderate	Low
Grapit	---	---	Low	Low	Low
231:					
Green River	---	---	High	High	High
Fluvaquents	---	---	Moderate	High	Low
232:					
Lakebench	---	---	Moderate	Low	Low
Strell	Bedrock (lithic)	7-20	Low	Low	Low
233:					
Lakebench	---	---	Moderate	Low	Low
Yampa	---	---	Moderate	Low	Low
234:					
Mantlemine	---	---	Moderate	Low	Low
235:					
Mantlemine	---	---	Moderate	Low	Low
Emlin	---	---	Moderate	Moderate	Low
236:					
Mido	---	---	Low	Low	Low
237:					
Mikim loam	---	---	Low	High	Moderate
Mikim silt loam	---	---	Low	High	High
238:					
Milok	---	---	Low	High	Moderate
239:					
Milok	---	---	Low	High	Moderate

Table 23.--Soil features--Continued

Map symbol and soil name	Restrictive layer		Potential for frost action	Risk of corrosion	
	Kind	Depth to top		Uncoated steel	Concrete
		In.			
239:					
Solirec	---	---	Low	Moderate	Low
Strych	---	---	Low	Moderate	Low
240:					
Milok	---	---	Low	High	Moderate
Strych	---	---	Low	High	Moderate
241:					
Pensore	Bedrock (lithic)	10-20	Low	Moderate	Low
Roto	Bedrock (lithic)	20-40	Low	Low	Low
242:					
Riverwash	---	---	None	---	---
243:					
Rizno	Bedrock (lithic)	4-20	Moderate	Low	Low
Windcomb	Bedrock (lithic)	6-20	Low	High	High
Anasazi	Bedrock (lithic)	20-40	Moderate	Low	Low
244:					
Rock outcrop	Bedrock (lithic)	0-0	None	---	---
Hackling	Bedrock (lithic)	10-20	Low	Moderate	Low
245:					
Rock outcrop	Bedrock (lithic)	0-0	None	---	---
Torriorthents	Bedrock (lithic)	4-30	Moderate	Moderate	Low
Ustorthents	Bedrock (lithic)	10-40	Moderate	Low	Low
246:					
Schoonover	Bedrock (lithic)	10-20	Moderate	Low	Low
Duffymont	Bedrock (lithic)	4-20	Moderate	High	Moderate
247:					
Stout	Bedrock (lithic)	7-20	Low	Low	Low
Rock outcrop	Bedrock (lithic)	0-0	None	---	---
248:					
Strych	---	---	Low	Moderate	Low
Mellenthin	Bedrock (lithic)	8-20	Moderate	Low	Low
249:					
Zillion	---	---	Moderate	Low	Low
Yampa	---	---	Moderate	Low	Low
Clyl	---	---	High	High	Moderate
250:					
Abracon	---	---	Low	High	Moderate

Table 23.--Soil features--Continued

Map symbol and soil name	Restrictive layer		Potential for frost action	Risk of corrosion	
	Kind	Depth to top		Uncoated steel	Concrete
		In.			
251:					
Badland	Bedrock (paralithic)	0-2	Low	High	High
Renegade	Bedrock (paralithic)	40-60	Moderate	High	Moderate
252:					
Bigtom	---	---	Moderate	Moderate	Low
Namlot	Bedrock (lithic)	10-20	Moderate	Moderate	Low
Dokie	---	---	Low	Moderate	Low
253:					
Clapper	---	---	Low	High	Moderate
254:					
Cliff	---	---	Low	High	Moderate
255:					
Clyl	---	---	High	High	Moderate
Pinerid	Bedrock (lithic)	10-20	Moderate	High	Moderate
256:					
Cortyzack	---	---	Moderate	High	Moderate
Diagulch	---	---	Moderate	High	Moderate
257:					
Cortyzack	---	---	Moderate	High	Moderate
Duffymont	Bedrock (lithic)	4-20	Moderate	High	Moderate
258:					
Cortyzack	---	---	Moderate	High	Moderate
Flynncove	---	---	Moderate	High	Moderate
259:					
Denco	Bedrock (paralithic)	20-40	Low	High	Moderate
Gerst	Bedrock (paralithic)	6-20	Low	High	Moderate
260:					
Dokie	---	---	Low	Moderate	Low
Flynncove	---	---	Moderate	High	Moderate
261:					
Dokie	---	---	Low	Moderate	Low
Namlot	Bedrock (lithic)	10-20	Moderate	Moderate	Low
262:					
Gompers	Bedrock (lithic)	8-20	Moderate	High	Moderate
263:					
Hanksville	Bedrock (paralithic)	20-40	Low	High	High

Table 23.--Soil features--Continued

Map symbol and soil name	Restrictive layer		Potential for frost action	Risk of corrosion	
	Kind	Depth to top		Uncoated steel	Concrete
		In.			
264:					
Mikim	---	---	Low	High	Moderate
265:					
Mikim	---	---	Low	High	High
266:					
Rock outcrop	Bedrock (lithic)	0-0	None	---	---
Boxring	Bedrock (lithic)	10-20	Moderate	Moderate	Low
Tridell	---	---	Moderate	High	Moderate
267:					
Solirec	---	---	Low	High	Moderate
Abracon	---	---	Low	High	Moderate
Begay	---	---	Low	High	Moderate
268:					
Toliver	Bedrock (lithic)	40-60	Moderate	High	Moderate
Rock outcrop	Bedrock (lithic)	0-0	None	---	---
269:					
Walknolls	Bedrock (lithic)	8-20	Low	High	Moderate
Badland	Bedrock (paralithic)	0-2	Low	High	High
Rock outcrop	Bedrock (lithic)	0-0	None	---	---
270:					
Walknolls	Bedrock (lithic)	8-20	Low	High	Moderate
Gilston	---	---	Low	High	Moderate
271:					
Water	---	---	---	---	---

Table 24.--Water features

(Depths of layers are in feet. See text for definitions of terms used in this table. Estimates of the frequency of ponding and flooding apply to the whole year rather than to individual months. Absence of an entry indicates that the feature is not a concern or that data were not estimated.)

Map symbol and soil name	Hydrologic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.	Ft.				
1:									
Abor	D	Jan.-Dec.	---	---	---	---	None	---	None
2:									
Abor	D	Jan.-Dec.	---	---	---	---	None	---	None
3:									
Adderton	B	March	---	---	---	---	None	Brief	Rare
		April	---	---	---	---	None	Brief	Rare
		May	---	---	---	---	None	Brief	Rare
		June	---	---	---	---	None	Brief	Rare
4:									
Almy	B	Jan.-Dec.	---	---	---	---	None	---	None
5:									
Apmay	C	March	---	---	---	---	None	Brief	Rare
		April	1.5-3.0	>6.0	---	---	None	Brief	Rare
		May	1.5-3.0	>6.0	---	---	None	Brief	Rare
		June	1.5-3.0	>6.0	---	---	None	Brief	Rare
6:									
Avalon	B	Jan.-Dec.	---	---	---	---	None	---	None
Mack	B	Jan.-Dec.	---	---	---	---	None	---	None
7:									
Avalon	B	Jan.-Dec.	---	---	---	---	None	---	None
Persayo, moist	C	Jan.-Dec.	---	---	---	---	None	---	None
Degater	D	Jan.-Dec.	---	---	---	---	None	---	None
8:									
Badland	D	Jan.-Dec.	---	---	---	---	None	---	None
9:									
Baroid	A	March	---	---	---	---	None	Brief	Rare
		April	5.0-7.0	>6.0	---	---	None	Brief	Rare
		May	5.0-7.0	>6.0	---	---	None	Brief	Rare
		June	5.0-7.0	>6.0	---	---	None	Brief	Rare

Table 24.--Water features--Continued

Map symbol and soil name	Hydrologic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.	Ft.				
9:									
Eghelm	B	March	---	---	---	---	None	Brief	Rare
		April	5.0-6.0	>6.0	---	---	None	Brief	Rare
		May	5.0-6.0	>6.0	---	---	None	Brief	Rare
		June	5.0-6.0	>6.0	---	---	None	Brief	Rare
10:									
Battlement	B	March	---	---	---	---	None	Brief	Rare
		April	---	---	---	---	None	Brief	Rare
		May	---	---	---	---	None	Brief	Rare
		June	---	---	---	---	None	Brief	Rare
11:									
Battlement, saline	B	March	---	---	---	---	None	Brief	Rare
		April	3.3-5.0	>6.0	---	---	None	Brief	Rare
		May	3.3-5.0	>6.0	---	---	None	Brief	Rare
		June	3.3-5.0	>6.0	---	---	None	Brief	Rare
12:									
Berlake	B	Jan.-Dec.	---	---	---	---	None	---	None
13:									
Berlake	B	Jan.-Dec.	---	---	---	---	None	---	None
14:									
Berlake	B	Jan.-Dec.	---	---	---	---	None	---	None
Maysprings	B	Jan.-Dec.	---	---	---	---	None	---	None
15:									
Berlake	B	Jan.-Dec.	---	---	---	---	None	---	None
Taffom	B	Jan.-Dec.	---	---	---	---	None	---	None
Gretdivid	B	Jan.-Dec.	---	---	---	---	None	---	None
16:									
Bilhil	C	April	3.0-5.0	>6.0	---	---	None	---	None
		May	3.0-5.0	>6.0	---	---	None	---	None
		June	3.0-5.0	>6.0	---	---	None	---	None
17:									
Binco	D	Jan.-Dec.	---	---	---	---	None	---	None
18:									
Boltus	D	Jan.-Dec.	---	---	---	---	None	---	None

Table 24.--Water features--Continued

Map symbol and soil name	Hydrologic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.	Ft.				
18:									
Beamton	D	Jan.-Dec.	---	---	---	---	None	---	None
19:									
Borollic Natrargids	D	Jan.-Dec.	---	---	---	---	None	---	None
Borollic Haplargids	B	Jan.-Dec.	---	---	---	---	None	---	None
Ustic Torrifluvents	B	March	---	---	---	---	None	Brief	Rare
		April	3.0-6.0	>6.0	---	---	None	Brief	Rare
		May	3.0-6.0	>6.0	---	---	None	Brief	Rare
		June	3.0-6.0	>6.0	---	---	None	Brief	Rare
20:									
Brownsto	B	Jan.-Dec.	---	---	---	---	None	---	None
Castee	B	Jan.-Dec.	---	---	---	---	None	---	None
21:									
Bulkley	D	Jan.-Dec.	---	---	---	---	None	---	None
22:									
Bulkley	D	Jan.-Dec.	---	---	---	---	None	---	None
23:									
Bulkley	D	Jan.-Dec.	---	---	---	---	None	---	None
24:									
Bulkley	D	Jan.-Dec.	---	---	---	---	None	---	None
Quilt	C	Jan.-Dec.	---	---	---	---	None	---	None
25:									
Campspass	C	Jan.-Dec.	---	---	---	---	None	---	None
26:									
Campspass	C	Jan.-Dec.	---	---	---	---	None	---	None
27:									
Canlodore	A	Jan.-Dec.	---	---	---	---	None	---	None
28:									
Carbol	C	Jan.-Dec.	---	---	---	---	None	---	None
Irigul	D	Jan.-Dec.	---	---	---	---	None	---	None

Table 24.--Water features--Continued

Map symbol and soil name	Hydrologic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.	Ft.				
28:									
Rock outcrop	D	Jan.-Dec.	---	---	---	---	None	---	None
29:									
Carbol	C	Jan.-Dec.	---	---	---	---	None	---	None
Miracle	C	Jan.-Dec.	---	---	---	---	None	---	None
30:									
Carmody	B	Jan.-Dec.	---	---	---	---	None	---	None
Rock River	B	Jan.-Dec.	---	---	---	---	None	---	None
Crestman	D	Jan.-Dec.	---	---	---	---	None	---	None
31:									
Castee	B	Jan.-Dec.	---	---	---	---	None	---	None
32:									
Chroder	B	Jan.-Dec.	---	---	---	---	None	---	None
33:									
Clayburn, warm	B	Jan.-Dec.	---	---	---	---	None	---	None
34:									
Clayburn	B	Jan.-Dec.	---	---	---	---	None	---	None
Foidel	B	Jan.-Dec.	---	---	---	---	None	---	None
35:									
Clayburn	B	Jan.-Dec.	---	---	---	---	None	---	None
Youga, moist	B	Jan.-Dec.	---	---	---	---	None	---	None
36:									
Clifsand	B	Jan.-Dec.	---	---	---	---	None	---	None
Chroder	B	Jan.-Dec.	---	---	---	---	None	---	None
37:									
Cochetopa	C	Jan.-Dec.	---	---	---	---	None	---	None
38:									
Cochetopa	C	Jan.-Dec.	---	---	---	---	None	---	None

Table 24.--Water features--Continued

Map symbol and soil name	Hydrologic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.	Ft.				
39:									
Cochetopa, warm	C	Jan.-Dec.	---	---	---	---	None	---	None
40:									
Cochetopa	C	Jan.-Dec.	---	---	---	---	None	---	None
Gothic	C	Jan.-Dec.	---	---	---	---	None	---	None
41:									
Cochetopa	C	Jan.-Dec.	---	---	---	---	None	---	None
Gothic	C	Jan.-Dec.	---	---	---	---	None	---	None
42:									
Cochetopa	C	Jan.-Dec.	---	---	---	---	None	---	None
Jerry	C	Jan.-Dec.	---	---	---	---	None	---	None
43:									
Coldspring, moist	B	Jan.-Dec.	---	---	---	---	None	---	None
44:									
Cowestglen	B	March	---	---	---	---	None	Brief	Rare
		April	---	---	---	---	None	Brief	Rare
		May	---	---	---	---	None	Brief	Rare
		June	---	---	---	---	None	Brief	Rare
45:									
Coyet	A	Jan.-Dec.	---	---	---	---	None	---	None
46:									
Coyet	A	Jan.-Dec.	---	---	---	---	None	---	None
47:									
Coyet	A	Jan.-Dec.	---	---	---	---	None	---	None
Crestman, moist	D	Jan.-Dec.	---	---	---	---	None	---	None
48:									
Crago	B	Jan.-Dec.	---	---	---	---	None	---	None
Pensore	D	Jan.-Dec.	---	---	---	---	None	---	None
Grapit	B	Jan.-Dec.	---	---	---	---	None	---	None

Table 24.--Water features--Continued

Map symbol and soil name	Hydrologic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.	Ft.				
49:									
Cryoborolls, slumped------	C	Jan.-Dec.	---	---	---	---	None	---	None
50:									
Cushool-------------------	C	Jan.-Dec.	---	---	---	---	None	---	None
51:									
Cushool-------------------	C	Jan.-Dec.	---	---	---	---	None	---	None
52:									
Danavore------------------	B	Jan.-Dec.	---	---	---	---	None	---	None
Waybe---------------------	D	Jan.-Dec.	---	---	---	---	None	---	None
53:									
Davtone-------------------	B	Jan.-Dec.	---	---	---	---	None	---	None
Forsey--------------------	B	Jan.-Dec.	---	---	---	---	None	---	None
54:									
Deaver--------------------	C	Jan.-Dec.	---	---	---	---	None	---	None
Avalon--------------------	B	Jan.-Dec.	---	---	---	---	None	---	None
55:									
Deaver--------------------	C	Jan.-Dec.	---	---	---	---	None	---	None
Chipeta-------------------	D	Jan.-Dec.	---	---	---	---	None	---	None
56:									
Debone--------------------	D	Jan.-Dec.	---	---	---	---	None	---	None
57:									
Detra---------------------	B	Jan.-Dec.	---	---	---	---	None	---	None
Cortyzack-----------------	B	Jan.-Dec.	---	---	---	---	None	---	None
58:									
Diaflats------------------	B	Jan.-Dec.	---	---	---	---	None	---	None
Fondillas-----------------	D	Jan.-Dec.	---	---	---	---	None	---	None
59:									
Dranyon-------------------	B	Jan.-Dec.	---	---	---	---	None	---	None

Table 24.--Water features--Continued

Map symbol and soil name	Hydrologic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.	Ft.				
60:									
Dumps, mine	---	Jan.-Dec.	---	---	---	---	None	---	None
61:									
Ecklund	B	Jan.-Dec.	---	---	---	---	None	---	None
Tipperary	A	Jan.-Dec.	---	---	---	---	None	---	None
62:									
Eghelm	B	March	---	---	---	---	None	Brief	Rare
		April	---	---	---	---	None	Brief	Rare
		May	---	---	---	---	None	Brief	Rare
		June	---	---	---	---	None	Brief	Rare
63:									
Eghelm, moist	B	March	---	---	---	---	None	Brief	Rare
		April	5.0-6.0	>6.0	---	---	None	Brief	Rare
		May	5.0-6.0	>6.0	---	---	None	Brief	Rare
		June	5.0-6.0	>6.0	---	---	None	Brief	Rare
64:									
Emlin	B	Jan.-Dec.	---	---	---	---	None	---	None
65:									
Emlin	B	Jan.-Dec.	---	---	---	---	None	---	None
Tymosling	C	Jan.-Dec.	---	---	---	---	None	---	None
66:									
Evanot	B	Jan.-Dec.	---	---	---	---	None	---	None
67:									
Evanot	B	Jan.-Dec.	---	---	---	---	None	---	None
68:									
Evanot	B	Jan.-Dec.	---	---	---	---	None	---	None
Yamo	B	Jan.-Dec.	---	---	---	---	None	---	None
69:									
Fenster	B	Jan.-Dec.	---	---	---	---	None	---	None
Thenipel	B	Jan.-Dec.	---	---	---	---	None	---	None

Table 24.--Water features--Continued

Map symbol and soil name	Hydrologic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.	Ft.				
70:									
Fluvaquents, frequently flooded	D	January	0.0	>6.0	---	---	None	Very long	Frequent
		February	0.0	>6.0	---	---	None	Very long	Frequent
		March	0.0	>6.0	---	---	None	Very long	Frequent
		April	0.0	>6.0	---	---	None	Very long	Frequent
		May	0.0	>6.0	---	---	None	Very long	Frequent
		June	0.0	>6.0	---	---	None	Very long	Frequent
		July	0.0	>6.0	---	---	None	Very long	Frequent
		August	0.0	>6.0	---	---	None	Very long	Frequent
		September	0.0	>6.0	---	---	None	Very long	Frequent
		October	0.0	>6.0	---	---	None	Very long	Frequent
		November	0.0	>6.0	---	---	None	Very long	Frequent
		December	0.0	>6.0	---	---	None	Very long	Frequent
Haplaquolls, frequently flooded	D	January	0.0	>6.0	---	---	None	Very long	Frequent
		February	0.0	>6.0	---	---	None	Very long	Frequent
		March	0.0	>6.0	---	---	None	Very long	Frequent
		April	0.0	>6.0	---	---	None	Very long	Frequent
		May	0.0	>6.0	---	---	None	Very long	Frequent
		June	0.0	>6.0	---	---	None	Very long	Frequent
		July	0.0	>6.0	---	---	None	Very long	Frequent
		August	0.0	>6.0	---	---	None	Very long	Frequent
		September	0.0	>6.0	---	---	None	Very long	Frequent
		October	0.0	>6.0	---	---	None	Very long	Frequent
		November	0.0	>6.0	---	---	None	Very long	Frequent
		December	0.0	>6.0	---	---	None	Very long	Frequent
71:									
Flygare, dry	B	Jan.-Dec.	---	---	---	---	None	---	None
72:									
Foidel, cool	B	Jan.-Dec.	---	---	---	---	None	---	None
73:									
Foidel	B	Jan.-Dec.	---	---	---	---	None	---	None
74:									
Foidel, moist	B	Jan.-Dec.	---	---	---	---	None	---	None
Flygare	B	Jan.-Dec.	---	---	---	---	None	---	None
Skyway, moist	B	Jan.-Dec.	---	---	---	---	None	---	None

Table 24.--Water features--Continued

Map symbol and soil name	Hydrologic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.	Ft.				
75:									
Fonce	B	Jan.-Dec.	---	---	---	---	None	---	None
76:									
Fonce	B	Jan.-Dec.	---	---	---	---	None	---	None
77:									
Forelle	B	Jan.-Dec.	---	---	---	---	None	---	None
78:									
Forelle	B	Jan.-Dec.	---	---	---	---	None	---	None
79:									
Forelle	B	Jan.-Dec.	---	---	---	---	None	---	None
Evanot	B	Jan.-Dec.	---	---	---	---	None	---	None
80:									
Forelle	B	Jan.-Dec.	---	---	---	---	None	---	None
Evanot	B	Jan.-Dec.	---	---	---	---	None	---	None
81:									
Forelle	B	Jan.-Dec.	---	---	---	---	None	---	None
Obadia	D	Jan.-Dec.	---	---	---	---	None	---	None
82:									
Forelle	B	Jan.-Dec.	---	---	---	---	None	---	None
Pinelli	C	Jan.-Dec.	---	---	---	---	None	---	None
Maysprings	B	Jan.-Dec.	---	---	---	---	None	---	None
83:									
Forsey	B	Jan.-Dec.	---	---	---	---	None	---	None
Libeg	B	Jan.-Dec.	---	---	---	---	None	---	None
84:									
Gebson, moist	B	Jan.-Dec.	---	---	---	---	None	---	None
Youga	B	Jan.-Dec.	---	---	---	---	None	---	None

Table 24.--Water features--Continued

Map symbol and soil name	Hydrologic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.	Ft.				
85:									
Giarch	D	March	---	---	---	---	None	Brief	Rare
		April	4.0-6.0	>6.0	---	---	None	Brief	Rare
		May	4.0-6.0	>6.0	---	---	None	Brief	Rare
		June	4.0-6.0	>6.0	---	---	None	Brief	Rare
86:									
Gracot	A	Jan.-Dec.	---	---	---	---	None	---	None
Maybell	A	Jan.-Dec.	---	---	---	---	None	---	None
87:									
Gretdivid	B	Jan.-Dec.	---	---	---	---	None	---	None
Taffom	B	Jan.-Dec.	---	---	---	---	None	---	None
Abor	D	Jan.-Dec.	---	---	---	---	None	---	None
88:									
Grieves	B	Jan.-Dec.	---	---	---	---	None	---	None
89:									
Grieves	B	Jan.-Dec.	---	---	---	---	None	---	None
90:									
Grieves	B	Jan.-Dec.	---	---	---	---	None	---	None
Crestman	D	Jan.-Dec.	---	---	---	---	None	---	None
91:									
Grieves	B	Jan.-Dec.	---	---	---	---	None	---	None
Yamo	B	Jan.-Dec.	---	---	---	---	None	---	None
Crestman	D	Jan.-Dec.	---	---	---	---	None	---	None
92:									
Grimm	A	Jan.-Dec.	---	---	---	---	None	---	None
Ustic Torriorthents, shallow	D	Jan.-Dec.	---	---	---	---	None	---	None

Table 24.--Water features--Continued

Map symbol and soil name	Hydrologic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.	Ft.				
93:									
Gullied land	---	January	---	---	---	---	None	Brief	Occasional
		February	---	---	---	---	None	Brief	Occasional
		March	---	---	---	---	None	Brief	Occasional
		April	---	---	---	---	None	Brief	Occasional
		May	---	---	---	---	None	Brief	Occasional
		June	---	---	---	---	None	Brief	Occasional
		July	---	---	---	---	None	Brief	Occasional
		August	---	---	---	---	None	Brief	Occasional
		September	---	---	---	---	None	Brief	Occasional
		December	---	---	---	---	None	Brief	Occasional
94:									
Hapney, moist	D	April	4.0-6.0	>6.0	---	---	None	---	None
		May	4.0-6.0	>6.0	---	---	None	---	None
		June	4.0-6.0	>6.0	---	---	None	---	None
95:									
Haterton	C	Jan.-Dec.	---	---	---	---	None	---	None
Piezon	B	Jan.-Dec.	---	---	---	---	None	---	None
96:									
Heathcoat	C	Jan.-Dec.	---	---	---	---	None	---	None
97:									
Heathcoat	C	Jan.-Dec.	---	---	---	---	None	---	None
Clayburn	B	Jan.-Dec.	---	---	---	---	None	---	None
98:									
Herm	C	Jan.-Dec.	---	---	---	---	None	---	None
Fughes	C	Jan.-Dec.	---	---	---	---	None	---	None
99:									
Hesperus, dry	B	Jan.-Dec.	---	---	---	---	None	---	None
100:									
Hesperus	B	Jan.-Dec.	---	---	---	---	None	---	None
101:									
Hesperus	B	Jan.-Dec.	---	---	---	---	None	---	None
102:									
Holter	B	Jan.-Dec.	---	---	---	---	None	---	None

Table 24.--Water features--Continued

Map symbol and soil name	Hydrologic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.	Ft.				
102:									
Detra	B	Jan.-Dec.	---	---	---	---	None	---	None
103:									
Iles	C	Jan.-Dec.	---	---	---	---	None	---	None
104:									
Ironco	B	Jan.-Dec.	---	---	---	---	None	---	None
Mulgon, dry	B	Jan.-Dec.	---	---	---	---	None	---	None
105:									
Ironsprings	B	Jan.-Dec.	---	---	---	---	None	---	None
106:									
Ironsprings	B	Jan.-Dec.	---	---	---	---	None	---	None
107:									
Ironsprings	B	Jan.-Dec.	---	---	---	---	None	---	None
Maysprings	B	Jan.-Dec.	---	---	---	---	None	---	None
Gretdivid	B	Jan.-Dec.	---	---	---	---	None	---	None
108:									
Jerry	C	Jan.-Dec.	---	---	---	---	None	---	None
Cochetopa	C	Jan.-Dec.	---	---	---	---	None	---	None
109:									
Joebas	D	Jan.-Dec.	---	---	---	---	None	---	None
Rock outcrop	D	Jan.-Dec.	---	---	---	---	None	---	None
110:									
Kemmerer	D	Jan.-Dec.	---	---	---	---	None	---	None
111:									
Kemmerer	D	Jan.-Dec.	---	---	---	---	None	---	None
Grapit	B	Jan.-Dec.	---	---	---	---	None	---	None
112:									
Kemmerer	D	Jan.-Dec.	---	---	---	---	None	---	None
Moyerson	D	Jan.-Dec.	---	---	---	---	None	---	None

Table 24.--Water features--Continued

Map symbol and soil name	Hydrologic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.	Ft.				
113:									
Kemmerer	D	Jan.-Dec.	---	---	---	---	None	---	None
Yamo	B	Jan.-Dec.	---	---	---	---	None	---	None
114:									
Lamphier	B	Jan.-Dec.	---	---	---	---	None	---	None
115:									
Lamphier	B	Jan.-Dec.	---	---	---	---	None	---	None
116:									
Lamphier	B	Jan.-Dec.	---	---	---	---	None	---	None
Jerry	C	Jan.-Dec.	---	---	---	---	None	---	None
117:									
Lamphier	B	Jan.-Dec.	---	---	---	---	None	---	None
Jerry	C	Jan.-Dec.	---	---	---	---	None	---	None
118:									
Lander	C	March	---	---	---	---	None	Brief	Rare
		April	2.5-3.5	>6.0	---	---	None	Brief	Rare
		May	2.5-3.5	>6.0	---	---	None	Brief	Rare
		June	2.5-3.5	>6.0	---	---	None	Brief	Rare
119:									
Langspring	B	Jan.-Dec.	---	---	---	---	None	---	None
120:									
Layoint	C	Jan.-Dec.	---	---	---	---	None	---	None
Moosed	C	Jan.-Dec.	---	---	---	---	None	---	None
Berlake	B	Jan.-Dec.	---	---	---	---	None	---	None
121:									
Leaps	C	Jan.-Dec.	---	---	---	---	None	---	None
122:									
Leswill	B	Jan.-Dec.	---	---	---	---	None	---	None
Rogrube	B	Jan.-Dec.	---	---	---	---	None	---	None

Table 24.--Water features--Continued

Map symbol and soil name	Hydrologic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.	Ft.				
123:									
Lilsnake	C	Jan.-Dec.	---	---	---	---	None	---	None
Sandwash	C	Jan.-Dec.	---	---	---	---	None	---	None
124:									
Losee	B	Jan.-Dec.	---	---	---	---	None	---	None
Thornburgh, dry	B	Jan.-Dec.	---	---	---	---	None	---	None
125:									
Massadona	D	Jan.-Dec.	---	---	---	---	None	---	None
126:									
Massadona	D	Jan.-Dec.	---	---	---	---	None	---	None
Youngston, moist	B	March	---	---	---	---	None	Brief	Rare
		April	---	---	---	---	None	Brief	Rare
		May	---	---	---	---	None	Brief	Rare
		June	---	---	---	---	None	Brief	Rare
127:									
Maudlin	B	Jan.-Dec.	---	---	---	---	None	---	None
Duffymont	C	Jan.-Dec.	---	---	---	---	None	---	None
128:									
Maybell	A	Jan.-Dec.	---	---	---	---	None	---	None
129:									
Maybell	A	Jan.-Dec.	---	---	---	---	None	---	None
130:									
Maysprings	B	Jan.-Dec.	---	---	---	---	None	---	None
131:									
Maysprings	B	Jan.-Dec.	---	---	---	---	None	---	None
Gretdivid	B	Jan.-Dec.	---	---	---	---	None	---	None
132:									
Milren	C	Jan.-Dec.	---	---	---	---	None	---	None
133:									
Miracle	C	Jan.-Dec.	---	---	---	---	None	---	None

Table 24.--Water features--Continued

Map symbol and soil name	Hydrologic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.	Ft.				
133:									
Coldspring	B	Jan.-Dec.	---	---	---	---	None	---	None
134:									
Morapos	C	Jan.-Dec.	---	---	---	---	None	---	None
135:									
Morapos	C	Jan.-Dec.	---	---	---	---	None	---	None
136:									
Morapos	C	Jan.-Dec.	---	---	---	---	None	---	None
Pagoda	C	Jan.-Dec.	---	---	---	---	None	---	None
137:									
Morset	B	Jan.-Dec.	---	---	---	---	None	---	None
Youga	B	Jan.-Dec.	---	---	---	---	None	---	None
138:									
Moyerson	D	Jan.-Dec.	---	---	---	---	None	---	None
Rentsac	D	Jan.-Dec.	---	---	---	---	None	---	None
139:									
Muggins	C	Jan.-Dec.	---	---	---	---	None	---	None
140:									
Ninot	B	Jan.-Dec.	---	---	---	---	None	---	None
Crago	B	Jan.-Dec.	---	---	---	---	None	---	None
Garlips	B	Jan.-Dec.	---	---	---	---	None	---	None
141:									
Nortez, cool	C	Jan.-Dec.	---	---	---	---	None	---	None
Morapos	C	Jan.-Dec.	---	---	---	---	None	---	None
142:									
Nortez, cool	C	Jan.-Dec.	---	---	---	---	None	---	None
Morapos	C	Jan.-Dec.	---	---	---	---	None	---	None
143:									
Nunemaker	D	Jan.-Dec.	---	---	---	---	None	---	None

Table 24.--Water features--Continued

Map symbol and soil name	Hydrologic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.	Ft.				
144:									
Pagoda	C	Jan.-Dec.	---	---	---	---	None	---	None
145:									
Pagoda	C	Jan.-Dec.	---	---	---	---	None	---	None
146:									
Pavillion	B	Jan.-Dec.	---	---	---	---	None	---	None
Degater	D	Jan.-Dec.	---	---	---	---	None	---	None
147:									
Peeler	B	Jan.-Dec.	---	---	---	---	None	---	None
148:									
Pilotpeak	D	Jan.-Dec.	---	---	---	---	None	---	None
Grubrob	B	Jan.-Dec.	---	---	---	---	None	---	None
149:									
Pinelli	C	Jan.-Dec.	---	---	---	---	None	---	None
150:									
Pinelli	C	Jan.-Dec.	---	---	---	---	None	---	None
151:									
Pinelli, dry	C	Jan.-Dec.	---	---	---	---	None	---	None
152:									
Pinridge	B	March	---	---	---	---	None	Brief	Rare
		April	---	---	---	---	None	Brief	Rare
		May	---	---	---	---	None	Brief	Rare
		June	---	---	---	---	None	Brief	Rare
153:									
Pricecreek	D	Jan.-Dec.	---	---	---	---	None	---	None
154:									
Quealman	B	April	---	---	---	---	None	Very brief	Occasional
		May	---	---	---	---	None	Very brief	Occasional
		June	---	---	---	---	None	Very brief	Occasional
		July	---	---	---	---	None	Very brief	Occasional
		August	---	---	---	---	None	Very brief	Occasional
155:									
Rencot	D	Jan.-Dec.	---	---	---	---	None	---	None

Table 24.--Water features--Continued

Map symbol and soil name	Hydrologic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.	Ft.				
155:									
Duffymont	C	Jan.-Dec.	---	---	---	---	None	---	None
156:									
Rentsac	D	Jan.-Dec.	---	---	---	---	None	---	None
157:									
Rentsac	D	Jan.-Dec.	---	---	---	---	None	---	None
Moyerson	D	Jan.-Dec.	---	---	---	---	None	---	None
158:									
Rock outcrop	D	Jan.-Dec.	---	---	---	---	None	---	None
Earsman	D	Jan.-Dec.	---	---	---	---	None	---	None
159:									
Rock outcrop	D	Jan.-Dec.	---	---	---	---	None	---	None
Haploborolls	D	Jan.-Dec.	---	---	---	---	None	---	None
160:									
Rock outcrop	D	Jan.-Dec.	---	---	---	---	None	---	None
Torriorthents	D	Jan.-Dec.	---	---	---	---	None	---	None
161:									
Rock River	B	Jan.-Dec.	---	---	---	---	None	---	None
162:									
Rock River	B	Jan.-Dec.	---	---	---	---	None	---	None
163:									
Rock River	B	Jan.-Dec.	---	---	---	---	None	---	None
164:									
Rock River	B	Jan.-Dec.	---	---	---	---	None	---	None
Taffom	B	Jan.-Dec.	---	---	---	---	None	---	None
165:									
Rogrube sandy loam	B	Jan.-Dec.	---	---	---	---	None	---	None
Rogrube clay loam	B	Jan.-Dec.	---	---	---	---	None	---	None

Table 24.--Water features--Continued

Map symbol and soil name	Hydrologic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.	Ft.				
166:									
Routt	C	Jan.-Dec.	---	---	---	---	None	---	None
167:									
Routt	C	Jan.-Dec.	---	---	---	---	None	---	None
Cochetopa	C	Jan.-Dec.	---	---	---	---	None	---	None
Binco	D	Jan.-Dec.	---	---	---	---	None	---	None
168:									
Ruedloff	B	Jan.-Dec.	---	---	---	---	None	---	None
169:									
Ruedloff	B	Jan.-Dec.	---	---	---	---	None	---	None
Dunul	A	Jan.-Dec.	---	---	---	---	None	---	None
170:									
Ryan Park	B	Jan.-Dec.	---	---	---	---	None	---	None
171:									
Ryan Park	B	Jan.-Dec.	---	---	---	---	None	---	None
172:									
Ryan Park	B	Jan.-Dec.	---	---	---	---	None	---	None
Coyet	A	Jan.-Dec.	---	---	---	---	None	---	None
173:									
Ryark	B	Jan.-Dec.	---	---	---	---	None	---	None
Powderwash	C	Jan.-Dec.	---	---	---	---	None	---	None
174:									
Ryark	B	Jan.-Dec.	---	---	---	---	None	---	None
Maybell	A	Jan.-Dec.	---	---	---	---	None	---	None
175:									
Sandwash	C	Jan.-Dec.	---	---	---	---	None	---	None
Langspring	B	Jan.-Dec.	---	---	---	---	None	---	None
Baston	C	Jan.-Dec.	---	---	---	---	None	---	None

Table 24.--Water features--Continued

Map symbol and soil name	Hydrologic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.	Ft.				
176:									
Schooner	D	Jan.-Dec.	---	---	---	---	None	---	None
Rock outcrop	D	Jan.-Dec.	---	---	---	---	None	---	None
177:									
Schooner	D	Jan.-Dec.	---	---	---	---	None	---	None
Tricera	A	Jan.-Dec.	---	---	---	---	None	---	None
178:									
Simanni	B	Jan.-Dec.	---	---	---	---	None	---	None
Ruedloff	B	Jan.-Dec.	---	---	---	---	None	---	None
179:									
Skyway, dry	B	Jan.-Dec.	---	---	---	---	None	---	None
180:									
Spool	C	Jan.-Dec.	---	---	---	---	None	---	None
Maybell	A	Jan.-Dec.	---	---	---	---	None	---	None
181:									
Stunner	B	Jan.-Dec.	---	---	---	---	None	---	None
182:									
Stunner, moist	B	Jan.-Dec.	---	---	---	---	None	---	None
Emlin	B	Jan.-Dec.	---	---	---	---	None	---	None
183:									
Styers	D	Jan.-Dec.	---	---	---	---	None	---	None
Ironsprings	B	Jan.-Dec.	---	---	---	---	None	---	None
Maysprings	B	Jan.-Dec.	---	---	---	---	None	---	None
184:									
Styers	D	Jan.-Dec.	---	---	---	---	None	---	None
Pinelli	C	Jan.-Dec.	---	---	---	---	None	---	None
Taffom	B	Jan.-Dec.	---	---	---	---	None	---	None

Table 24.--Water features--Continued

Map symbol and soil name	Hydrologic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.	Ft.				
185:									
Taffom	B	Jan.-Dec.	---	---	---	---	None	---	None
186:									
Talamantes	B	Jan.-Dec.	---	---	---	---	None	---	None
187:									
Talamantes	B	Jan.-Dec.	---	---	---	---	None	---	None
188:									
Talamantes, saline	B	Jan.-Dec.	---	---	---	---	None	---	None
189:									
Tipper	C	Jan.-Dec.	---	---	---	---	None	---	None
Crustown	C	Jan.-Dec.	---	---	---	---	None	---	None
190:									
Tipperary	A	Jan.-Dec.	---	---	---	---	None	---	None
191:									
Tipperary	A	Jan.-Dec.	---	---	---	---	None	---	None
192:									
Tipperary	A	Jan.-Dec.	---	---	---	---	None	---	None
Willwood	A	Jan.-Dec.	---	---	---	---	None	---	None
193:									
Tisworth	C	Jan.-Dec.	---	---	---	---	None	---	None
194:									
Tolman	C	Jan.-Dec.	---	---	---	---	None	---	None
Duffymont	C	Jan.-Dec.	---	---	---	---	None	---	None
195:									
Torriorthents	D	Jan.-Dec.	---	---	---	---	None	---	None
196:									
Torriorthents	D	Jan.-Dec.	---	---	---	---	None	---	None
Baston	C	Jan.-Dec.	---	---	---	---	None	---	None
197:									
Torriorthents	D	Jan.-Dec.	---	---	---	---	None	---	None

Table 24.--Water features--Continued

Map symbol and soil name	Hydrologic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.	Ft.				
197:									
Rock outcrop, sandstone---	D	Jan.-Dec.	---	---	---	---	None	---	None
198:									
Torriorthents----------	D	Jan.-Dec.	---	---	---	---	None	---	None
Rock outcrop, shale-------	D	Jan.-Dec.	---	---	---	---	None	---	None
199:									
Torriorthents----------	D	Jan.-Dec.	---	---	---	---	None	---	None
Torripsamments----------	B	Jan.-Dec.	---	---	---	---	None	---	None
200:									
Tresano----------	B	Jan.-Dec.	---	---	---	---	None	---	None
201:									
Tresano----------	B	Jan.-Dec.	---	---	---	---	None	---	None
Hiatha----------	D	Jan.-Dec.	---	---	---	---	None	---	None
Kandaly----------	A	Jan.-Dec.	---	---	---	---	None	---	None
202:									
Turzo----------	B	Jan.-Dec.	---	---	---	---	None	---	None
203:									
Turzo, saline----------	B	Jan.-Dec.	---	---	---	---	None	---	None
204:									
Typic Natrargids----------	D	Jan.-Dec.	---	---	---	---	None	---	None
205:									
Uffens----------	C	Jan.-Dec.	---	---	---	---	None	---	None
206:									
Ustorthents, frigid-------	D	Jan.-Dec.	---	---	---	---	None	---	None
Borolls----------	B	Jan.-Dec.	---	---	---	---	None	---	None
207:									
Vermillion----------	C	Jan.-Dec.	---	---	---	---	None	---	None
Langspring----------	B	Jan.-Dec.	---	---	---	---	None	---	None

Table 24.--Water features--Continued

Map symbol and soil name	Hydrologic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.	Ft.				
208:									
Wallson	B	Jan.-Dec.	---	---	---	---	None	---	None
Tricera	A	Jan.-Dec.	---	---	---	---	None	---	None
209:									
Weed	B	Jan.-Dec.	---	---	---	---	None	---	None
210:									
Willwood	A	Jan.-Dec.	---	---	---	---	None	---	None
Sheppard, cool	A	Jan.-Dec.	---	---	---	---	None	---	None
211:									
Willwood	A	Jan.-Dec.	---	---	---	---	None	---	None
Tipperary	A	Jan.-Dec.	---	---	---	---	None	---	None
212:									
Willwood	A	Jan.-Dec.	---	---	---	---	None	---	None
Tipperary, cobbly substratum	A	Jan.-Dec.	---	---	---	---	None	---	None
213:									
Winevada	B	Jan.-Dec.	---	---	---	---	None	---	None
Splitro	C	Jan.-Dec.	---	---	---	---	None	---	None
214:									
Winevada	B	Jan.-Dec.	---	---	---	---	None	---	None
Splitro	C	Jan.-Dec.	---	---	---	---	None	---	None
215:									
Winkleman	C	March	---	---	---	---	None	Brief	Rare
		April	2.5-4.0	>6.0	---	---	None	Brief	Rare
		May	2.5-4.0	>6.0	---	---	None	Brief	Rare
		June	2.5-4.0	>6.0	---	---	None	Brief	Rare
		July	2.5-4.0	>6.0	---	---	None	---	None
		August	2.5-4.0	>6.0	---	---	None	---	None
		September	2.5-4.0	>6.0	---	---	None	---	None
216:									
Yamo	B	Jan.-Dec.	---	---	---	---	None	---	None

Table 24.--Water features--Continued

Map symbol and soil name	Hydrologic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.	Ft.				
217:									
Yamo	B	Jan.-Dec.	---	---	---	---	None	---	None
218:									
Yellowwash	D	Jan.-Dec.	---	---	---	---	None	---	None
Piezon	B	Jan.-Dec.	---	---	---	---	None	---	None
219:									
Youga	B	Jan.-Dec.	---	---	---	---	None	---	None
220:									
Youga	B	Jan.-Dec.	---	---	---	---	None	---	None
Dinnen	B	Jan.-Dec.	---	---	---	---	None	---	None
221:									
Youga	B	Jan.-Dec.	---	---	---	---	None	---	None
Gelkie	B	Jan.-Dec.	---	---	---	---	None	---	None
Clayburn, warm	B	Jan.-Dec.	---	---	---	---	None	---	None
222:									
Youngston, cool	B	March	---	---	---	---	None	Brief	Rare
		April	4.0-6.0	>6.0	---	---	None	Brief	Rare
		May	4.0-6.0	>6.0	---	---	None	Brief	Rare
		June	---	---	---	---	None	Brief	Rare
223:									
Youngston, well drained	B	March	---	---	---	---	None	Brief	Rare
		April	---	---	---	---	None	Brief	Rare
		May	---	---	---	---	None	Brief	Rare
		June	---	---	---	---	None	Brief	Rare
224:									
Zillion	B	Jan.-Dec.	---	---	---	---	None	---	None
Barkelew, moist	B	Jan.-Dec.	---	---	---	---	None	---	None
Grapit	B	Jan.-Dec.	---	---	---	---	None	---	None
225:									
Abracon	B	Jan.-Dec.	---	---	---	---	None	---	None
Solirec	B	Jan.-Dec.	---	---	---	---	None	---	None

Table 24.--Water features--Continued

Map symbol and soil name	Hydrologic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.	Ft.				
226:									
Arches	D	Jan.-Dec.	---	---	---	---	None	---	None
Mespun	A	Jan.-Dec.	---	---	---	---	None	---	None
Rock outcrop	D	Jan.-Dec.	---	---	---	---	None	---	None
227:									
Bankard family	A	March	---	---	---	---	None	Brief	Rare
		April	---	---	---	---	None	Brief	Rare
		May	---	---	---	---	None	Brief	Rare
		June	---	---	---	---	None	Brief	Rare
Cameo	B	March	---	---	---	---	None	Brief	Rare
		April	---	---	---	---	None	Brief	Rare
		May	---	---	---	---	None	Brief	Rare
		June	---	---	---	---	None	Brief	Rare
228:									
Bondman	D	Jan.-Dec.	---	---	---	---	None	---	None
Rock outcrop	D	Jan.-Dec.	---	---	---	---	None	---	None
229:									
Cameo	B	March	---	---	---	---	None	Brief	Rare
		April	---	---	---	---	None	Brief	Rare
		May	---	---	---	---	None	Brief	Rare
		June	---	---	---	---	None	Brief	Rare
230:									
Cragnot	B	Jan.-Dec.	---	---	---	---	None	---	None
Pensore	D	Jan.-Dec.	---	---	---	---	None	---	None
Grapit	B	Jan.-Dec.	---	---	---	---	None	---	None

Table 24.--Water features--Continued

Map symbol and soil name	Hydrologic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.	Ft.				
231:									
Green River	C	January	2.0-4.0	>6.0	---	---	None	---	None
		February	2.0-4.0	>6.0	---	---	None	---	None
		March	2.0-4.0	>6.0	---	---	None	Brief	Rare
		April	2.0-4.0	>6.0	---	---	None	Brief	Rare
		May	2.0-4.0	>6.0	---	---	None	Brief	Rare
		June	2.0-4.0	>6.0	---	---	None	Brief	Rare
		July	2.0-4.0	>6.0	---	---	None	---	None
		August	2.0-4.0	>6.0	---	---	None	---	None
		September	2.0-4.0	>6.0	---	---	None	---	None
		October	2.0-4.0	>6.0	---	---	None	---	None
		November	2.0-4.0	>6.0	---	---	None	---	None
		December	2.0-4.0	>6.0	---	---	None	---	None
Fluvaquents	C	January	0.0-1.5	>6.0	0.0-1.0	Long	Frequent	Long	Frequent
		February	0.0-1.5	>6.0	0.0-1.0	Long	Frequent	Long	Frequent
		March	0.0-1.5	>6.0	0.0-1.0	Long	Frequent	Long	Frequent
		April	0.0-1.5	>6.0	0.0-1.0	Long	Frequent	Long	Frequent
		May	0.0-1.5	>6.0	0.0-1.0	Long	Frequent	Long	Frequent
		June	0.0-1.5	>6.0	0.0-1.0	Long	Frequent	Long	Frequent
		July	0.0-1.5	>6.0	0.0-1.0	Long	Frequent	Long	Frequent
		August	0.0-1.5	>6.0	0.0-1.0	Long	Frequent	Long	Frequent
		September	0.0-1.5	>6.0	0.0-1.0	Long	Frequent	Long	Frequent
		October	0.0-1.5	>6.0	0.0-1.0	Long	Frequent	Long	Frequent
		November	0.0-1.5	>6.0	0.0-1.0	Long	Frequent	Long	Frequent
		December	0.0-1.5	>6.0	0.0-1.0	Long	Frequent	Long	Frequent
232:									
Lakebench	B	Jan.-Dec.	---	---	---	---	None	---	None
Strell	D	Jan.-Dec.	---	---	---	---	None	---	None
233:									
Lakebench	B	Jan.-Dec.	---	---	---	---	None	---	None
Yampa	B	Jan.-Dec.	---	---	---	---	None	---	None
234:									
Mantlemine	B	Jan.-Dec.	---	---	---	---	None	---	None
235:									
Mantlemine	B	Jan.-Dec.	---	---	---	---	None	---	None
Emlin	B	Jan.-Dec.	---	---	---	---	None	---	None

Table 24.--Water features--Continued

Map symbol and soil name	Hydrologic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.	Ft.				
236:									
Mido	A	Jan.-Dec.	---	---	---	---	None	---	None
237:									
Mikim loam	B	Jan.-Dec.	---	---	---	---	None	---	None
Mikim silt loam	B	Jan.-Dec.	---	---	---	---	None	---	None
238:									
Milok	B	Jan.-Dec.	---	---	---	---	None	---	None
239:									
Milok	B	Jan.-Dec.	---	---	---	---	None	---	None
Solirec	B	Jan.-Dec.	---	---	---	---	None	---	None
Strych	B	Jan.-Dec.	---	---	---	---	None	---	None
240:									
Milok	B	Jan.-Dec.	---	---	---	---	None	---	None
Strych	B	Jan.-Dec.	---	---	---	---	None	---	None
241:									
Pensore	D	Jan.-Dec.	---	---	---	---	None	---	None
Roto	C	Jan.-Dec.	---	---	---	---	None	---	None
242:									
Riverwash	D	January	0.0-2.0	>6.0	---	---	None	Very long	Frequent
		February	0.0-2.0	>6.0	---	---	None	Very long	Frequent
		March	0.0-2.0	>6.0	---	---	None	Very long	Frequent
		April	0.0-2.0	>6.0	---	---	None	Very long	Frequent
		May	0.0-2.0	>6.0	---	---	None	Very long	Frequent
		June	0.0-2.0	>6.0	---	---	None	Very long	Frequent
		July	0.0-2.0	>6.0	---	---	None	Very long	Frequent
		August	0.0-2.0	>6.0	---	---	None	Brief	Rare
		September	0.0-2.0	>6.0	---	---	None	Brief	Rare
		October	0.0-2.0	>6.0	---	---	None	Very long	Frequent
		November	0.0-2.0	>6.0	---	---	None	Very long	Frequent
		December	0.0-2.0	>6.0	---	---	None	Very long	Frequent
243:									
Rizno	D	Jan.-Dec.	---	---	---	---	None	---	None
Windcomb	D	Jan.-Dec.	---	---	---	---	None	---	None

Table 24.--Water features--Continued

Map symbol and soil name	Hydrologic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.	Ft.				
243:									
Anasazi	C	Jan.-Dec.	---	---	---	---	None	---	None
244:									
Rock outcrop	D	Jan.-Dec.	---	---	---	---	None	---	None
Hackling	D	Jan.-Dec.	---	---	---	---	None	---	None
245:									
Rock outcrop	D	Jan.-Dec.	---	---	---	---	None	---	None
Torriorthents	D	Jan.-Dec.	---	---	---	---	None	---	None
Ustorthents	B	Jan.-Dec.	---	---	---	---	None	---	None
246:									
Schoonover	B	Jan.-Dec.	---	---	---	---	None	---	None
Duffymont	D	Jan.-Dec.	---	---	---	---	None	---	None
247:									
Stout	D	Jan.-Dec.	---	---	---	---	None	---	None
Rock outcrop	D	Jan.-Dec.	---	---	---	---	None	---	None
248:									
Strych	B	Jan.-Dec.	---	---	---	---	None	---	None
Mellenthin	D	Jan.-Dec.	---	---	---	---	None	---	None
249:									
Zillion	B	Jan.-Dec.	---	---	---	---	None	---	None
Yampa	B	Jan.-Dec.	---	---	---	---	None	---	None
Clyl	B	Jan.-Dec.	---	---	---	---	None	---	None
250:									
Abracon	B	Jan.-Dec.	---	---	---	---	None	---	None
251:									
Badland	D	Jan.-Dec.	---	---	---	---	None	---	None
Renegade	B	Jan.-Dec.	---	---	---	---	None	---	None

Table 24.--Water features--Continued

Map symbol and soil name	Hydrologic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.	Ft.				
252:									
Bigtom	B	Jan.-Dec.	---	---	---	---	None	---	None
Namlot	D	Jan.-Dec.	---	---	---	---	None	---	None
Dokie	B	Jan.-Dec.	---	---	---	---	None	---	None
253:									
Clapper	B	Jan.-Dec.	---	---	---	---	None	---	None
254:									
Cliff	B	Jan.-Dec.	---	---	---	---	None	---	None
255:									
Clyl	B	Jan.-Dec.	---	---	---	---	None	---	None
Pinerid	D	Jan.-Dec.	---	---	---	---	None	---	None
256:									
Cortyzack	B	Jan.-Dec.	---	---	---	---	None	---	None
Diagulch	B	Jan.-Dec.	---	---	---	---	None	---	None
257:									
Cortyzack	B	Jan.-Dec.	---	---	---	---	None	---	None
Duffymont	D	Jan.-Dec.	---	---	---	---	None	---	None
258:									
Cortyzack	B	Jan.-Dec.	---	---	---	---	None	---	None
Flynncove	B	Jan.-Dec.	---	---	---	---	None	---	None
259:									
Denco	D	Jan.-Dec.	---	---	---	---	None	---	None
Gerst	D	Jan.-Dec.	---	---	---	---	None	---	None
260:									
Dokie	B	Jan.-Dec.	---	---	---	---	None	---	None
Flynncove	B	Jan.-Dec.	---	---	---	---	None	---	None
261:									
Dokie	B	Jan.-Dec.	---	---	---	---	None	---	None

Table 24.--Water features--Continued

Map symbol and soil name	Hydrologic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.	Ft.				
261:									
Namlot	D	Jan.-Dec.	---	---	---	---	None	---	None
262:									
Gompers	D	Jan.-Dec.	---	---	---	---	None	---	None
263:									
Hanksville	C	Jan.-Dec.	---	---	---	---	None	---	None
264:									
Mikim	B	Jan.-Dec.	---	---	---	---	None	---	None
265:									
Mikim	B	Jan.-Dec.	---	---	---	---	None	---	None
266:									
Rock outcrop	D	Jan.-Dec.	---	---	---	---	None	---	None
Boxring	D	Jan.-Dec.	---	---	---	---	None	---	None
Tridell	B	Jan.-Dec.	---	---	---	---	None	---	None
267:									
Solirec	B	Jan.-Dec.	---	---	---	---	None	---	None
Abracon	B	Jan.-Dec.	---	---	---	---	None	---	None
Begay	B	Jan.-Dec.	---	---	---	---	None	---	None
268:									
Toliver	B	Jan.-Dec.	---	---	---	---	None	---	None
Rock outcrop	D	Jan.-Dec.	---	---	---	---	None	---	None
269:									
Walknolls	D	Jan.-Dec.	---	---	---	---	None	---	None
Badland	D	Jan.-Dec.	---	---	---	---	None	---	None
Rock outcrop	D	Jan.-Dec.	---	---	---	---	None	---	None
270:									
Walknolls	D	Jan.-Dec.	---	---	---	---	None	---	None
Gilston	B	Jan.-Dec.	---	---	---	---	None	---	None

Table 24.--Water features--Continued

Map symbol and soil name	Hydrologic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft.	Ft.	Ft.				
271:									
Water	---	Jan.-Dec.	---	---	---	---	None	---	None

Table 25--Classification of the soils

(An asterisk in the first column indicates a taxadjunct to the series. See text for a description of those characteristics that are outside the range of the series.)

Soil name	Family or higher taxonomic class
Abor	Fine, montmorillonitic, frigid Udorthentic Chromusterts
Abracon (1)	Coarse-loamy, mixed, superactive, mesic Ustic Haplocalcids
Adderton	Fine-loamy, mixed Cumulic Cryoborolls
Almy	Fine-loamy, mixed Borollic Haplargids
Anasazi (2)	Coarse-loamy, mixed, superactive, mesic Ustic Haplocalcids
Apmay	Fine-loamy over sandy or sandy-skeletal, mixed Cumulic Haploborolls
Arches (2)	Mixed, mesic Lithic Torripsamments
Avalon	Fine-loamy, mixed, mesic Typic Calciorthids
Bankard family (2)	Sandy, mixed, mesic Ustic Torrifluvents
Barkelew	Loamy-skeletal, mixed Borollic Calciorthids
Baroid	Sandy, mixed, mesic Typic Torrifluvents
Baston	Fine, montmorillonitic, frigid Typic Natrargids
Battlement	Fine-loamy, mixed (calcareous), frigid Ustic Torrifluvents
Beamton	Fine, montmorillonitic (calcareous), frigid Typic Torriorthents
Begay (1)	Coarse-loamy, mixed, superactive, mesic Ustic Haplocambids
Berlake	Fine-loamy, mixed Aridic Argiborolls
Bigtom (1)	Loamy-skeletal, siliceous, superactive, frigid Pachic Argiustolls
Bilhil	Fine, montmorillonitic Aridic Haploborolls
Binco	Fine, montmorillonitic, frigid Udorthentic Chromusterts
Boltus	Clayey, montmorillonitic (calcareous), frigid, shallow Typic Torriorthents
Bondman (2)	Loamy, mixed, superactive, mesic Lithic Ustic Haplargids
Borollic Haplargids	Borollic Haplargids
Borollic Natrargids	Borollic Natrargids
Borolls	Borolls
Boxring (1)	Loamy-skeletal, siliceous, superactive, frigid Aridic Lithic Argiustolls
Brownsto	Loamy-skeletal, mixed Borollic Calciorthids
Bulkley	Fine, montmorillonitic, frigid Udorthentic Chromusterts
Cameo (2)	Coarse-loamy, mixed, superactive, calcareous, mesic Ustic Torrifluvents
Campspass	Fine, montmorillonitic Typic Eutroboralfs
Canlodore	Sandy-skeletal, mixed Typic Cryorthents
Carbol	Loamy, mixed Argic Lithic Cryoborolls
Carmody	Coarse-loamy, mixed (calcareous), frigid Ustic Torriorthents
Castee	Coarse-loamy, carbonatic Borollic Calciorthids
Chipeta	Clayey, mixed (calcareous), mesic, shallow Typic Torriorthents
Chroder	Coarse-loamy, mixed, mesic Typic Calciorthids
Clapper (1)	Loamy-skeletal, mixed, superactive, mesic Ustic Haplocalcids
Clayburn	Fine-loamy, mixed Argic Pachic Cryoborolls
Cliff (1)	Coarse-loamy, mixed, superactive, calcareous, mesic Ustic Torriorthents
Clifsand	Loamy-skeletal, mixed, mesic Typic Calciorthids
Clyl (2)	Loamy-skeletal, carbonatic Typic Calciborolls
Clyl (1)	Loamy-skeletal, carbonatic, frigid Typic Calciustolls
Cochetopa	Fine, montmorillonitic Argic Pachic Cryoborolls
Coldspring	Fine-loamy, mixed Argic Cryoborolls
Cortyzack	Fine-loamy, mixed Typic Argiborolls
Cortyzack (1)	Fine-loamy, mixed, superactive, frigid Calcidic Argiustolls
Cowestglen	Coarse-loamy, mixed (calcareous), frigid Ustic Torrifluvents
Coyet	Mixed, frigid Ustic Torripsamments
Cragnot (2)	Loamy-skeletal, carbonatic, frigid Haplocalcidic Ustochrepts
Crago	Loamy-skeletal, carbonatic Borollic Calciorthids
Crestman	Mixed, frigid, shallow Ustic Torripsamments
Crustown	Mixed, mesic, shallow Typic Torripsamments
Cryoborolls	Cryoborolls
Cushool	Fine-loamy, mixed Borollic Haplargids
Danavore	Loamy-skeletal, mixed (calcareous) Typic Cryorthents
Davtone	Fine-loamy, mixed Argic Pachic Cryoborolls
Deaver	Fine, montmorillonitic (calcareous), mesic Typic Torriorthents
Debone	Fine, montmorillonitic, frigid Typic Natrargids
Degater	Fine, montmorillonitic, mesic Typic Camborthids
Denco (1)	Fine, smectitic, mesic Leptic Haplotorrerts
Detra	Fine-loamy, mixed Pachic Argiborolls
Diaflats	Fine-loamy, mixed (calcareous), frigid Typic Torriorthents
Diagulch (1)	Fine-loamy, mixed, superactive, frigid Typic Haplustolls

Classification of the soils--Continued

Soil name	Family or higher taxonomic class
Dinnen	Coarse-loamy, mixed Typic Cryoborolls
Dokie (1)	Loamy-skeletal, siliceous, superactive Ustollic Haplocryalfs
Dranyon	Fine-loamy, mixed Argic Pachic Cryoborolls
Duffymont	Loamy-skeletal, mixed Lithic Haploborolls
Duffymont (2)	Loamy-skeletal, mixed, superactive Lithic Haploborolls
Duffymont (1)	Loamy-skeletal, mixed, superactive, frigid Lithic Haplustolls
Dunul	Sandy-skeletal, mixed, frigid Typic Torriorthents
Earsman	Loamy-skeletal, mixed (calcareous), frigid Lithic Ustic Torriorthents
Ecklund	Mixed, mesic Typic Torripsamments
Eghelm	Coarse-loamy, mixed (calcareous), mesic Typic Torrifluvents
Emlin	Fine-loamy, mixed Aridic Argiborolls
Emlin (2)	Fine-loamy, mixed, superactive Aridic Argiborolls
Evanot	Fine-loamy, mixed Aridic Argiborolls
Fenster	Fine-silty, mixed (calcareous), frigid Typic Torriorthents
Fluvaquents	Fluvaquents
Flygare	Loamy-skeletal, mixed Cryic Pachic Paleborolls
Flynncove (1)	Loamy-skeletal, siliceous, superactive, frigid Typic Argiustolls
Foidel	Fine-loamy, mixed Cryic Pachic Paleborolls
*Foidel	Fine-loamy, mixed Cryic Paleborolls
Fonce	Fine-loamy, mixed Borollic Haplargids
Fondillas	Loamy-skeletal, mixed (calcareous), frigid Lithic Torriorthents
Forelle	Fine-loamy, mixed Borollic Haplargids
Forsey	Loamy-skeletal, mixed Argic Cryoborolls
Fughes	Fine, montmorillonitic Pachic Argiborolls
Garlips	Fine-loamy, mixed Pachic Haploborolls
Gebson	Fine-loamy, mixed Argic Cryoborolls
Gelkie	Fine-loamy, mixed Argic Cryoborolls
Gerst (1)	Loamy, mixed, superactive, calcareous, mesic, shallow Ustic Torriorthents
Giarch	Fine, montmorillonitic Borollic Natrargids
Gilston (1)	Coarse-loamy, mixed, superactive, mesic Sodic Ustic Haplocambids
Gompers (1)	Loamy-skeletal, mixed, superactive, calcareous, frigid Aridic Lithic Ustorthents
Gothic	Fine, montmorillonitic Argic Cryoborolls
Gracot	Sandy, mixed, frigid Ustic Torriorthents
Grapit	Loamy-skeletal, carbonatic Aridic Calciborolls
Green River (2)	Coarse-loamy, mixed, superactive, calcareous, mesic Oxyaquic Torrifluvents
Gretdivid	Fine-loamy over sandy or sandy-skeletal, mixed Borollic Haplargids
Grieves	Coarse-loamy, mixed (calcareous), frigid Ustic Torriorthents
Grimm	Sandy-skeletal, mixed, frigid Ustic Torriorthents
Grubrob	Fine-loamy, mixed Borollic Haplargids
Hackling (2)	Loamy-skeletal, mixed, superactive, frigid Aridic Lithic Ustochrepts
Hanksville (1)	Fine, mixed, active, calcareous, mesic Typic Torriorthents
Haplaquolls	Haplaquolls
Haploborolls	Haploborolls
Hapney	Fine, montmorillonitic Aridic Natriborolls
Haterton	Loamy, mixed (calcareous), frigid, shallow Typic Torriorthents
Heathcoat	Fine, montmorillonitic Argic Cryoborolls
Herm	Fine, montmorillonitic Typic Argiborolls
Hesperus	Fine-loamy, mixed Pachic Argiborolls
Hiatha	Clayey, montmorillonitic (calcareous), frigid, shallow Typic Torriorthents
Holter	Loamy-skeletal, mixed Typic Argiborolls
Iles	Fine, montmorillonitic Mollic Eutroboralfs
Irigul	Loamy-skeletal, mixed Lithic Cryoborolls
Ironco	Loamy-skeletal, mixed Typic Argiborolls
Ironsprings	Coarse-loamy, mixed Aridic Argiborolls
Jerry	Fine, montmorillonitic Argic Cryoborolls
Joebas	Loamy, mixed Borollic Lithic Haplargids
Kandaly	Mixed, frigid Typic Torripsamments
Kemmerer	Fine, montmorillonitic Borollic Camborthids
Lakebench (2)	Coarse-loamy, mixed, superactive, frigid Haplocalcidic Ustochrepts
Lamphier	Fine-loamy, mixed Pachic Cryoborolls
Lander	Fine-loamy, mixed Fluvaquentic Haploborolls
Langspring	Fine-loamy, mixed, frigid Typic Calciorthids
Layoint	Sandy, mixed Aridic Haploborolls
Leaps	Fine, montmorillonitic Typic Cryoborolls

Classification of the soils--Continued

Soil name	Family or higher taxonomic class
Leswill	Fine-silty, mixed, frigid Cambic Gypsiorthids
Libeg	Loamy-skeletal, mixed Argic Cryoborolls
Lilsnake	Loamy, mixed, frigid Lithic Calciorthids
Losee	Loamy-skeletal, mixed Typic Cryochrepts
Mack	Fine-loamy, mixed, mesic Typic Haplargids
Mantlemine (2)	Fine-loamy, mixed, superactive, frigid Calcidic Haplustalfs
Massadona	Fine, montmorillonitic, mesic Typic Camborthids
Maudlin	Fine-loamy, mixed Typic Argiborolls
Maybell	Mixed, frigid Ustic Torripsamments
Maysprings	Fine-loamy, mixed Borollic Haplargids
Mellenthin (2)	Loamy-skeletal, mixed, superactive, mesic Lithic Ustic Haplocalcids
Mespun (2)	Siliceous, mesic Ustic Torripsamments
Mido (2)	Mixed, mesic Ustic Torripsamments
Mikim (2)	Fine-loamy, mixed, superactive, calcareous, mesic Ustic Torriorthents
*Mikim (1)	Fine-loamy, mixed, superactive, mesic Ustic Haplocambids
Milok (2)	Coarse-loamy, mixed, superactive, mesic Ustic Haplocalcids
Milren	Fine, montmorillonitic Borollic Paleargids
Miracle	Fine-loamy, mixed Argic Cryoborolls
Moosed	Sandy, mixed Lithic Haploborolls
Morapos	Fine, montmorillonitic Typic Argiborolls
Morset	Fine-loamy, mixed Argic Cryoborolls
Moyerson	Clayey, montmorillonitic (calcareous), frigid, shallow Ustic Torriorthents
Muggins	Fine, montmorillonitic Typic Cryoboralfs
Mulgon	Loamy-skeletal, mixed Mollic Cryoboralfs
Namlot (1)	Loamy-skeletal, siliceous, superactive, frigid Lithic Argiustolls
Ninot	Fine-loamy, carbonatic Aridic Calciborolls
Nortez	Fine, montmorillonitic Typic Argiborolls
Nunemaker	Fine, montmorillonitic Borollic Camborthids
Obadia	Fine, montmorillonitic Borollic Natrargids
Pagoda	Fine, montmorillonitic Pachic Argiborolls
Pavillion	Fine-loamy, mixed, mesic Typic Camborthids
Peeler	Fine-loamy, mixed Typic Cryoboralfs
Pensore	Loamy-skeletal, carbonatic Borollic Lithic Calciorthids
Pensore (2)	Loamy-skeletal, carbonatic, frigid Aridic Lithic Ustochrepts
Persayo	Loamy, mixed (calcareous), mesic, shallow Typic Torriorthents
Piezon	Fine-loamy, mixed Borollic Calciorthids
Pilotpeak	Loamy-skeletal, mixed Borollic Lithic Calciorthids
Pinelli	Fine, montmorillonitic Borollic Haplargids
Pinerid (1)	Loamy-skeletal, carbonatic, frigid Lithic Calciustolls
Pinridge	Fine-loamy, mixed Cumulic Haploborolls
Powderwash	Coarse-loamy over clayey, mixed Borollic Haplargids
Pricecreek	Fine, montmorillonitic Borollic Camborthids
Quealman	Coarse-loamy, mixed (calcareous), frigid Typic Torrifluvents
Quilt	Fine, montmorillonitic Typic Argiborolls
Rencot	Loamy-skeletal, mixed Borollic Lithic Calciorthids
Renegade (1)	Loamy-skeletal, mixed, superactive, frigid Typic Haplustolls
Rentsac	Loamy-skeletal, mixed (calcareous), frigid Lithic Ustic Torriorthents
Rizno (2)	Loamy, mixed, superactive, calcareous, mesic Lithic Ustic Torriorthents
Rock River	Fine-loamy, mixed Borollic Haplargids
Rogrube	Fine-loamy, mixed, frigid Calcic Gypsiorthids
Roto (2)	Loamy-skeletal, carbonatic, frigid Haplocalcidic Ustochrepts
Routt	Fine, montmorillonitic Cryic Pachic Paleborolls
Ruedloff	Coarse-loamy, mixed, frigid Typic Haplargids
Ryan Park	Coarse-loamy, mixed Borollic Haplargids
Ryark	Coarse-loamy, mixed Borollic Haplargids
Sandwash	Loamy-skeletal, carbonatic, frigid Typic Calciorthids
Schooner	Mixed, mesic Lithic Torripsamments
Schoonover (2)	Loamy-skeletal, mixed, superactive, frigid Aridic Lithic Ustochrepts
Sheppard	Mixed, mesic Typic Torripsamments
Simanni	Fine-loamy, mixed, frigid Typic Haplargids
Skyway	Coarse-loamy, mixed Pachic Cryoborolls
Solirec	Fine-loamy, mixed, superactive, mesic Ustic Calciargids
Splitro	Loamy, mixed Lithic Cryoborolls
Spool	Mixed, frigid Lithic Torripsamments
Stout (2)	Loamy, mixed, superactive, nonacid, frigid Lithic Ustorthents

Classification of the soils--Continued

Soil name	Family or higher taxonomic class
Strell (2)	Frigid, coated Lithic Quartzipsamments
Strych (2)	Loamy-skeletal, mixed, superactive, mesic Ustic Haplocalcids
Stunner	Fine-loamy, mixed Borollic Haplargids
Styers	Fine, montmorillonitic, frigid Udorthentic Chromusterts
Taffom	Fine-loamy, mixed Borollic Haplargids
Talamantes	Fine-loamy, mixed (calcareous), frigid Typic Torriorthents
Thenipel	Fine-silty, mixed Borollic Camborthids
Thornburgh	Loamy-skeletal, mixed Typic Cryoborolls
Tipper	Mixed, mesic Typic Torripsamments
Tipperary	Mixed, mesic Typic Torripsamments
*Tipperary	Sandy, mixed, mesic Typic Torriorthents
Tisworth	Fine-loamy, mixed Borollic Natrargids
Toliver (1)	Loamy-skeletal, siliceous, superactive, frigid Torriorthentic Haplustolls
Tolman	Loamy-skeletal, mixed Lithic Argiborolls
Torriorthents	Torriorthents
Torripsamments	Torripsamments
Tresano	Fine-loamy, mixed, frigid Typic Haplargids
Tricera	Mixed, mesic Typic Torripsamments
Tridell (1)	Loamy-skeletal, mixed, superactive, frigid Aridic Calciustolls
Turzo	Fine-loamy, mixed (calcareous), mesic Typic Torriorthents
Tymosling	Fine, montmorillonitic Borollic Haplargids
Typic Natrargids	Typic Natrargids
Uffens	Fine-loamy, mixed, mesic Typic Natrargids
Ustic Torrifluvents	Ustic Torrifluvents
Ustic Torriorthents	Ustic Torriorthents
Ustorthents	Ustorthents
Vermillion	Loamy-skeletal, mixed, frigid Typic Calciorthids
Walknolls (1)	Loamy-skeletal, mixed, superactive, mesic Lithic Ustic Haplocalcids
Wallson	Coarse-loamy, mixed, mesic Typic Haplargids
Waybe	Clayey, mixed (calcareous), shallow Typic Cryorthents
Weed	Fine-loamy, mixed Pachic Argiborolls
Willwood	Sandy-skeletal, mixed, mesic Typic Torriorthents
Windcomb (2)	Loamy-skeletal, mixed, superactive, calcareous, mesic Lithic Ustic Torriorthents
Winevada	Fine-loamy, mixed Pachic Cryoborolls
Winkleman	Fine, montmorillonitic (calcareous), mesic Typic Torrifluvents
Yamo	Fine-loamy, mixed Borollic Camborthids
Yampa (2)	Loamy-skeletal, mixed, superactive, frigid Haplocalcidic Ustochrepts
Yellowwash	Loamy, mixed (calcareous), frigid Lithic Ustic Torriorthents
Youga	Fine-loamy, mixed Argic Cryoborolls
Youngston	Fine-loamy, mixed (calcareous), mesic Typic Torrifluvents
Zillion	Loamy-skeletal, mixed Pachic Argiborolls
Zillion (2)	Loamy-skeletal, mixed, superactive Pachic Argiborolls

(1) Classification from join unit from the Uintah Area, Utah Soil Survey Area.
(2) Classification from join unit from the Dinosaur National Monument, Colorado and Utah Soil Survey Area.

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UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO

UNITED STATES DEPARTMENT OF INTERIOR, BUREAU OF LAND MANAGEMENT
COLORADO AGRICULTURAL EXPERIMENT STATION, COLORADO STATE UNIVERSITY

SOIL LEGEND

SYMBOL	NAME
1	Abor silty clay loam, 12 to 25 percent slopes
2	Abor silty clay loam, 25 to 65 percent slopes
3	Adderton loam, 1 to 10 percent slopes
4	Almy loam, 3 to 15 percent slopes
5	Apmay clay loam, 0 to 1 percent slopes
6	Avalon-Mack complex, 1 to 12 percent slopes
7	Avalon-Persayo, moist Degater complex, 3 to 30 percent slopes
8	Badland
9	Baroid-Eghelm complex, 0 to 3 percent slopes
10	Battlement fine sandy loam, 0 to 3 percent slopes
11	Battlement silt loam, saline, 0 to 3 percent slopes
12	Berlake sandy loam, 3 to 12 percent slopes
13	Berlake sandy loam, 12 to 25 percent slopes
14	Berlake-Maysprings complex, 3 to 12 percent slopes
15	Berlake-Taffom Gretdivid complex, 10 to 20 percent slopes
16	Bilhil clay loam, 0 to 3 percent slopes
17	Binco gravelly clay loam, 15 to 45 percent slopes, very stony
18	Boltus-Beamton complex, 2 to 12 percent slopes
19	Borollic Natrargids-Borollic Haplargids-Ustic Torrifluvents complex, 0 to 20 percent slopes
20	Brownsto-Castee complex, 3 to 25 percent slopes
21	Bulkley stony loam, 15 to 30 percent slopes, very stony
22	Bulkley silty clay, 3 to 12 percent slopes
23	Bulkley silty clay, 12 to 25 percent slopes
24	Bulkley-Quilt complex, 12 to 45 percent slopes
25	Campspass fine sandy loam, 3 to 12 percent slopes
26	Campspass fine sandy loam, 12 to 25 percent slopes
27	Canlodore very cobbly loamy sand, 15 to 40 percent slopes
28	Carbol-Irigul-Rock outcrop complex, 3 to 25 percent slopes, very stony
29	Carbol-Miracle complex, 3 to 12 percent slopes
30	Carmody-Rock River Crestman complex, 6 to 15 percent slopes
31	Castee loam, 3 to 12 percent slopes
32	Chroder sandy loam, 3 to 12 percent slopes
33	Clayburn loam, warm, 3 to 25 percent slopes
34	Clayburn-Foidel complex, 25 to 55 percent slopes, very bouldery
35	Clayburn-Youga, moist complex, 15 to 45 percent slopes
36	Clifsand-Chroder complex, 3 to 12 percent slopes
37	Cochetopa loam, 12 to 25 percent slopes
38	Cochetopa loam, 25 to 65 percent slopes
39	Cochetopa loam, warm, 3 to 12 percent slopes
40	Cochetopa-Gothic complex, 10 to 25 percent slopes, extremely bouldery
41	Cochetopa-Gothic complex, 25 to 45 percent slopes, extremely stony
42	Cochetopa-Jerry complex, 3 to 15 percent slopes, extremely stony
43	Coldspring loam, moist, 1 to 12 percent slopes
44	Cowestglen sandy loam, 0 to 3 percent slopes
45	Coyet loamy sand, 3 to 12 percent slopes
46	Coyet loamy sand, 12 to 25 percent slopes
47	Coyet-Crestman, moist complex, 20 to 50 percent slopes
48	Crago-Pensore-Grapit association, 6 to 75 percent slopes
49	Cryoborolls, slumped, 15 to 50 percent slopes
50	Cushool fine sandy loam, 3 to 12 percent slopes
51	Cushool fine sandy loam, 12 to 25 percent slopes
52	Danavore-Waybe complex, 5 to 30 percent slopes
53	Davtone-Forsey complex, 12 to 35 percent slopes, very stony
54	Deaver-Avalon complex, 5 to 45 percent slopes
55	Deaver-Chipeta complex, 3 to 35 percent slopes
56	Debone loam, 0 to 3 percent slopes
57	Detra-Cortyzack complex, 1 to 12 percent slopes
58	Diaflats-Fondillas complex, 2 to 15 percent slopes
59	Dranyon loam, 3 to 20 percent slopes
60	Dumps, mine
61	Ecklund-Tipperary complex, 1 to 12 percent slopes
62	Eghelm loamy fine sand, 0 to 3 percent slopes
63	Eghelm loamy sand, moist, 0 to 3 percent slopes
64	Emlin loam, 1 to 12 percent slopes
65	Emlin-Tymosling complex, 1 to 15 percent slopes, very bouldery
66	Evanot loam, 1 to 12 percent slopes
67	Evanot loam, 12 to 25 percent slopes
68	Evanot-Yamo complex, 3 to 20 percent slopes
69	Fenster-Thenipel complex, 3 to 12 percent slopes
70	Fluvaquents and Haplaquolls soils, frequently flooded
71	Flygare loam, dry, 25 to 65 percent slopes
72	Foidel loam, cool, 3 to 25 percent slopes
73	Foidel loam, 25 to 65 percent slopes
74	Foidel, moist Flygare Skyway, moist complex, 3 to 25 percent slopes
75	Fonce sandy loam, 1 to 8 percent slopes
76	Fonce gravelly sandy loam, 3 to 12 percent slopes, very stony
77	Forelle loam, 3 to 12 percent slopes
78	Forelle loam, 12 to 25 percent slopes
79	Forelle-Evanot complex, 1 to 12 percent slopes
80	Forelle-Evanot complex, 12 to 25 percent slopes
81	Forelle-Obadia complex, 1 to 8 percent slopes
82	Forelle-Pinelli Maysprings complex, 5 to 20 percent slopes
83	Forsey-Libeg complex, 3 to 25 percent slopes, very stony
84	Gebson, moist-Youga complex, 5 to 25 percent slopes, extremely stony
85	Giarch fine sandy loam, 0 to 3 percent slopes
86	Gracot-Maybell complex, 5 to 30 percent slopes
87	Gretdivid-Taffom Abor complex, 10 to 30 percent slopes
88	Grieves loamy fine sand, 1 to 12 percent slopes
89	Grieves loamy fine sand, 12 to 25 percent slopes
90	Grieves-Crestman complex, 10 to 40 percent slopes
91	Grieves-Yamo-Crestman association, 3 to 45 percent slopes
92	Grimm-Ustic-Torriorthents, shallow complex, 15 to 45 percent slopes
93	Gullied land
94	Hapney fine sandy loam, moist, 0 to 1 percent slopes
95	Haterton-Piezon complex, 3 to 12 percent slopes
96	Heathcoat stony loam, 1 to 6 percent slopes, extremely stony
97	Heathcoat-Clayburn complex, 5 to 35 percent slopes, very stony
98	Herm-Fughes complex, 10 to 20 percent slopes, extremely bouldery
99	Hesperus fine sandy loam, dry, 2 to 15 percent slopes
100	Hesperus loam, 15 to 50 percent slopes
101	Hesperus loam, 3 to 25 percent slopes, very stony
102	Holter-Deitra complex, 3 to 25 percent slopes, extremely stony
103	Iles loam, 3 to 12 percent slopes
104	Ironco-Mulgon, dry complex, 25 to 50 percent slopes, extremely bouldery
105	Ironsprings loamy sand, 1 to 15 percent slopes
106	Ironsprings loamy sand, 15 to 30 percent slopes
107	Ironsprings-Maysprings-Gretdivid complex, 10 to 20 percent slopes
108	Jerry-Cochetopa complex, 5 to 35 percent slopes
109	Joebas-Rock outcrop complex, 5 to 40 percent slopes
110	Kemmerer silty clay loam, 12 to 25 percent slopes
111	Kemmerer-Grapit complex, 15 to 65 percent slopes
112	Kemmerer-Moyerson complex, 20 to 40 percent slopes
113	Kemmerer-Yamo complex, 5 to 30 percent slopes
114	Lamphier fine sandy loam, 3 to 25 percent slopes
115	Lamphier fine sandy loam, 25 to 65 percent slopes
116	Lamphier-Jerry complex, 3 to 25 percent slopes
117	Lamphier-Jerry complex, 25 to 65 percent slopes
118	Lander loam, 0 to 3 percent slopes
119	Langspring sandy loam, 3 to 12 percent slopes
120	Layoint-Moosed-Berlake complex, 1 to 20 percent slopes
121	Leaps clay loam, 3 to 15 percent slopes, very stony
122	Leswill-Rogrube complex, 1 to 7 percent slopes
123	Lilsnake-Sandwash complex, 3 to 20 percent slopes
124	Losee-Thornburgh dry, complex, 25 to 65 percent slopes
125	Massadona silty clay loam, 0 to 12 percent slopes
126	Massadona-Youngston moist, complex, 1 to 8 percent slopes
127	Maudlin-Duffymont complex, 3 to 15 percent slopes, very stony
128	Maybell sand, 3 to 12 percent slopes
129	Maybell sand, 12 to 45 percent slopes
130	Maysprings coarse sandy loam, 3 to 12 percent slopes
131	Maysprings-Gretdivid complex, 10 to 20 percent slopes
132	Milren fine sandy loam, 0 to 10 percent slopes
133	Miracle-Coldspring complex, 3 to 12 percent slopes
134	Morapos loam, 3 to 12 percent slopes
135	Morapos loam, 12 to 25 percent slopes
136	Morapos-Pagoda complex, 2 to 12 percent slopes
137	Morset-Youga complex, 3 to 12 percent slopes
138	Moyerson-Rentsac complex, 15 to 45 percent slopes
139	Muggins gravelly sandy loam, 3 to 20 percent slopes
140	Ninot-Crago-Garlips complex, 15 to 45 percent slopes
141	Nortez, cool-Morapos complex, 3 to 12 percent slopes
142	Nortez, cool-Morapos complex, 12 to 25 percent slopes
143	Nunemaker clay loam, 3 to 12 percent slopes
144	Pagoda loam, 12 to 25 percent slopes
145	Pagoda clay loam, 1 to 12 percent slopes
146	Pavillion-Degater complex, 3 to 20 percent slopes
147	Peeler stony fine sandy loam, 5 to 25 percent slopes, very stony
148	Pilotpeak-Grubrob complex, 1 to 12 percent slopes
149	Pinelli loam, 3 to 12 percent slopes
150	Pinelli clay loam, 3 to 15 percent slopes
151	Pinelli loam, dry, 3 to 8 percent slopes
152	Pinridge loam, 1 to 12 percent slopes
153	Pricecreek clay loam, 0 to 4 percent slopes
154	Quealman sand, 0 to 3 percent slopes
155	Rencot-Duffymont complex, 1 to 25 percent slopes
156	Rentsac channery sandy loam, 25 to 65 percent slopes
157	Rentsac-Moyerson complex, 25 to 65 percent slopes
158	Rock outcrop-Earsman complex, 10 to 45 percent slopes
159	Rock outcrop-Haploborolls complex, 10 to 40 percent slopes
160	Rock outcrop-Torriorthents complex, 50 to 75 percent slopes
161	Rock River sandy loam, 0 to 3 percent slopes
162	Rock River sandy loam, 3 to 12 percent slopes
163	Rock River sandy loam, 12 to 25 percent slopes
164	Rock River-Taffom complex, 3 to 20 percent slopes
165	Rogrube complex, 3 to 12 percent slopes
166	Routt loam, 3 to 25 percent slopes
167	Routt-Cochetopa-Binco complex, 10 to 30 percent slopes, extremely stony
168	Ruedloff sandy loam, 1 to 8 percent slopes
169	Ruedloff-Dunul complex, 5 to 25 percent slopes
170	Ryan Park loamy sand, 3 to 15 percent slopes
171	Ryan Park sandy loam, 0 to 3 percent slopes
172	Ryan Park-Coyet complex, 5 to 25 percent slopes
173	Ryark-Powderwash complex, 2 to 15 percent slopes
174	Ryark-Maybell complex, 1 to 12 percent slopes
175	Sandwash-Langspring-Baston complex, 1 to 6 percent slopes
176	Schooner-Rock outcrop complex, 5 to 45 percent slopes
177	Schooner-Tricera complex, 5 to 25 percent slopes
178	Simanni-Ruedloff complex, 1 to 10 percent slopes
179	Skyway fine sandy loam, dry, 15 to 75 percent slopes
180	Spool-Maybell complex, 5 to 40 percent slopes
181	Stunner sandy loam, 1 to 8 percent slopes
182	Stunner, moist-Emlin complex, 1 to 12 percent slopes
183	Styers-Ironsprings-Maysprings complex, 10 to 20 percent slopes
184	Styers-Pinelli-Taffom complex, 10 to 25 percent slopes
185	Taffom sandy loam, 3 to 15 percent slopes
186	Talamantes loam, 0 to 6 percent slopes
187	Talamantes loam, 6 to 15 percent slopes
188	Talamantes loam, saline, 0 to 8 percent slopes
189	Tipper-Crustown complex, 10 to 40 percent slopes
190	Tipperary sand, 5 to 20 percent slopes
191	Tipperary loamy fine sand, 3 to 12 percent slopes
192	Tipperary-Willwood complex, 1 to 12 percent slopes
193	Tisworth fine sandy loam, 0 to 9 percent slopes
194	Tolman-Duffymont complex, 10 to 30 percent slopes, extremely stony
195	Torriorthents, 12 to 25 percent slopes
196	Torriorthents-Baston complex, 3 to 12 percent slopes
197	Torriorthents-Rock outcrop, sandstone complex, 25 to 75 percent slopes
198	Torriorthents-Rock outcrop, shale complex, 30 to 75 percent slopes
199	Torriorthents-Torripsamments complex, 12 to 40 percent slopes
200	Tresano sandy loam, 3 to 12 percent slopes
201	Tresano-Hiatha-Kandaly association, 2 to 20 percent slopes
202	Turzo loam, 0 to 5 percent slopes
203	Turzo loam, saline, 1 to 8 percent slopes
204	Typic Natrargids, 0 to 5 percent slopes
205	Uffens fine sandy loam, 0 to 3 percent slopes
206	Ustorthents, frigid-Borolls complex, 25 to 75 percent slopes
207	Vermillion-Langspring complex, 3 to 25 percent slopes
208	Wallson-Tricera complex, 3 to 15 percent slopes
209	Weed sandy loam, 1 to 12 percent slopes
210	Willwood-Sheppard, cool complex, 1 to 12 percent slopes
211	Willwood-Tipperary complex, 12 to 40 percent slopes
212	Willwood-Tipperary, cobbly substratum complex, 1 to 12 percent slopes
213	Winevada-Splitro complex, 3 to 25 percent slopes
214	Winevada-Splitro complex, 25 to 65 percent slopes
215	Winkleman clay loam, 0 to 3 percent slopes
216	Yamo loam, 3 to 15 percent slopes
217	Yamo loam, 15 to 30 percent slopes
218	Yellowwash-Piezon complex, 5 to 15 percent slopes
219	Youga loam, 3 to 15 percent slopes
220	Youga-Dinnen complex, 3 to 12 percent slopes
221	Youga-Gelkie-Clayburn, warm complex, 25 to 45 percent slopes, extremely bouldery
222	Youngston loam, cool, 0 to 3 percent slopes
223	Youngston loam, well drained, 0 to 3 percent slopes
224	Zillion-Barkelew, moist-Grapit complex, 25 to 65 percent slopes, extremely stony
225	Abracon-Solirec complex, 3 to 8 percent slopes
226	Arches-Mespun-Rock outcrop complex, 4 to 40 percent slopes
227	Bankard family-Cameo complex, 0 to 5 percent slopes
228	Bondman-Rock outcrop complex, 5 to 40 percent slopes
229	Cameo loamy fine sand, 0 to 5 percent slopes
230	Cragnot-Pensore-Grapit association, 6 to 75 percent slopes, very stony
231	Green River-Fluvaquents complex, 0 to 2 percent slopes
232	Lakebench-Strell complex, 5 to 30 percent slopes
233	Lakebench-Yampa complex, 5 to 30 percent slopes, very stony
234	Mantlemine loam, 1 to 8 percent slopes
235	Mantlemine-Emlin complex, 1 to 12 percent slopes
236	Mido loamy fine sand, 3 to 12 percent slopes
237	Mikim complex, 1 to 4 percent slopes
238	Milok fine sandy loam, 3 to 8 percent slopes
239	Milok-Solirec-Strych complex, 10 to 65 percent slopes, very stony
240	Milok-Strych complex, 3 to 25 percent slopes, very stony
241	Pensore-Roto complex, 3 to 45 percent slopes, very stony
242	Riverwash
243	Rizno-Windcomb-Anasazi complex, 3 to 25 percent slopes, extremely flaggy
244	Rock outcrop-Hackling complex, 10 to 45 percent slopes, very stony
245	Rock outcrop, Torriorthents, and Ustorthents soils, 25 to 75 percent slopes, rubbly
246	Schoonover-Duffymont complex, 3 to 25 percent slopes, rubbly
247	Stout-Rock outcrop complex, 5 to 35 percent slopes, very stony
248	Strych-Mellenthin complex, 3 to 45 percent slopes, very bouldery
249	Zillion-Yampa-Clyl complex, 25 to 65 percent slopes, extremely flaggy
250	Abracon loam, 3 to 8 percent slopes
251	Badland-Renegade complex, 50 to 80 percent slopes
252	Bigtom-Namlot-Dokie association, 15 to 50 percent slopes
253	Clapper gravelly loam, 2 to 25 percent slopes
254	Cliff sandy loam, 2 to 4 percent slopes
255	Clyl-Pinerid association, 8 to 40 percent slopes
256	Cortyzack-Diagulch complex, 3 to 25 percent slopes
257	Cortyzack-Duffymont complex, 3 to 25 percent slopes, rubbly
258	Cortyzack-Flynncove association, 3 to 25 percent slopes
259	Denco-Gerst complex, 4 to 40 percent slopes
260	Dokie-Flynncove association, 25 to 50 percent slopes
261	Dokie-Namlot association, 15 to 70 percent slopes
262	Gompers very channery silt loam, 4 to 25 percent slopes
263	Hanksville silty clay loam, 2 to 25 percent slopes
264	Mikim loam, 3 to 15 percent slopes
265	Mikim silt loam, sodic, 1 to 4 percent slopes
266	Rock outcrop-Boxring Tridell complex, 10 to 50 percent slopes
267	Solirec-Abracon-Begay complex, 2 to 15 percent slopes
268	Toliver-Rock outcrop association, 50 to 80 percent slopes
269	Walknolls-Badland-Rock outcrop complex, 25 to 50 percent slopes
270	Walknolls-Gilston association, 2 to 25 percent slopes
271	Water

CONVENTIONAL AND SPECIAL SYMBOLS LEGEND

CULTURAL FEATURES

BOUNDARIES

- National, state, or province
- County or parish
- Minor civil division
- Reservation (national forest or park, state forest or park)
- Land grant
- Limit of soil survey (lable) and/or denied access area
- Field sheet matchline & neatline
- Previously Published Survey

OTHER BOUNDARY (label)

- Airport, airfield
- Cemetery
- City/county park

STATE COORDINATE TICK
1 890 000 FEET

LAND DIVISION CORNER (section and land grants)

GEOGRAPHIC COORDINATE TICK

TRANSPORTATION

- Divided roads
- Other roads
- Trail

ROAD EMBLEM & DESIGNATIONS

- Interstate (173, 79, 245)
- Federal (287, 410, 224)
- State (52, 52, 347)
- County, farm or ranch (1283)

RAILROAD

POWER TRANSMISSION LINE (normally not shown)

PIPE LINE (normally not shown)

FENCE (normally not shown)

LEVEES

- Without road
- With road
- With railroad

Single side slope (showing actual feature location)

DAMS

- Medium or Small (W)

LANDFORM FEATURES

- Prominent hill or peak
- Soil Sample Site (S)

MISCELLANEOUS CULTURAL FEATURES

- Farmstead, house (omit in urban areas)
- Church
- School
- Other Religion (label) (Mt Carmel)
- Located object (label) (Ranger Station)
- Tank (label) (Petroleum)
- Lookout Tower
- Oil and/or Natural Gas Wells
- Windmill
- Lighthouse

HYDROGRAPHIC FEATURES

STREAMS

- Perennial, double line
- Perennial, single line — Label Only
- Intermittent — Label Only
- Drainage end

DRAINAGE AND IRRIGATION

- Double-line canal (label) (CANAL)
- Perennial drainage and/or irrigation ditch — Label Only
- Intermittent drainage and/ or irrigation ditch — Label Only

SMALL LAKES, PONDS AND RESERVOIRS

- Perennial water
- Miscellaneous water
- Flood pool line (FLOOD POOL LINE)

MISCELLANEOUS WATER FEATURES

- Spring
- Well, artesian
- Well, irrigation

SPECIAL SYMBOLS FOR SOIL SURVEY AND SSURGO

SOIL DELINEATIONS AND SYMBOLS (57 43)

LANDFORM FEATURES

ESCARPMENTS

- Bedrock
- Other than bedrock

SHORT STEEP SLOPE

GULLY

DEPRESSION, closed

SINKHOLE

EXCAVATIONS

PITS

- Borrow pits
- Gravel pit
- Mine or quarry

LANDFILL

MISCELLANEOUS SURFACE FEATURES

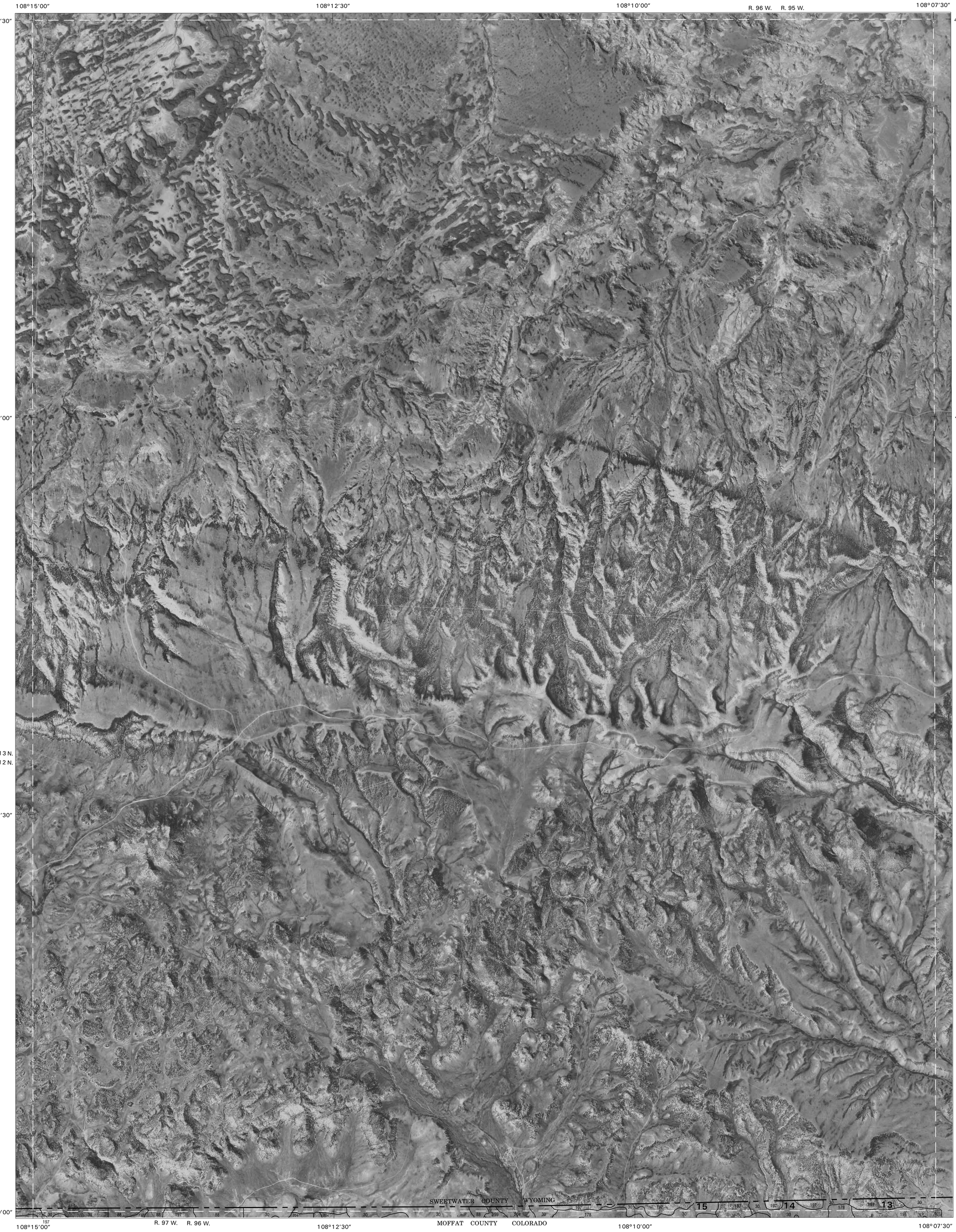
- Blowout
- Clay spot
- Gravelly spot
- Lava flow
- Marsh or swamp
- Rock outcrop (includes sandstone and shale)
- Saline spot
- Sandy spot
- Severely eroded spot
- Slide or slip
- Sodic spot
- Spoil area
- Stony spot
- Very stony spot
- Wet spot

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
POWDER MOUNTAIN QUADRANGLE
SHEET NUMBER 1 OF 110

108°15′00″ 108°12′30″ 108°10′00″ R. 96 W. R. 95 W. 108°07′30″

41°07′30″ 41°05′00″ T. 13 N. T. 12 N. 41°02′30″ 41°00′00″



Joins sheet 2, Rotten Springs

SWEETWATER COUNTY WYOMING
MOFFAT COUNTY COLORADO

Joins sheet 16, Reservoir Draw

Joins sheet 15, Powder Wash

Joins sheet 17, The Nipple NE

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

POWDER MOUNTAIN, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 1 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
ROTTEN SPRINGS QUADRANGLE
SHEET NUMBER 2 OF 110

108°07′30″ 108°05′00″ 108°02′30″ R. 95 W. R. 94 W. 108°00′00″

41°07′30″

41°05′00″

Joins sheet 1, Powder Mountain

Joins sheet 3, McPherson Springs

T. 13 N.
T. 12 N.

41°02′30″

41°00′00″

SWEETWATER COUNTY WYOMING
MOFFAT COUNTY COLORADO

R. 96 W. R. 95 W.

Joins sheet 16, Reservoir Draw

Joins sheet 17, The Nipple NE

Joins sheet 18, Bighole Butte

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

ROTTEN SPRINGS, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 2 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
MCPHERSON SPRINGS QUADRANGLE
SHEET NUMBER 3 OF 110

108°00′00″ 107°57′30″ 107°55′00″ 107°52′30″

R. 94 W. R. 93 W.

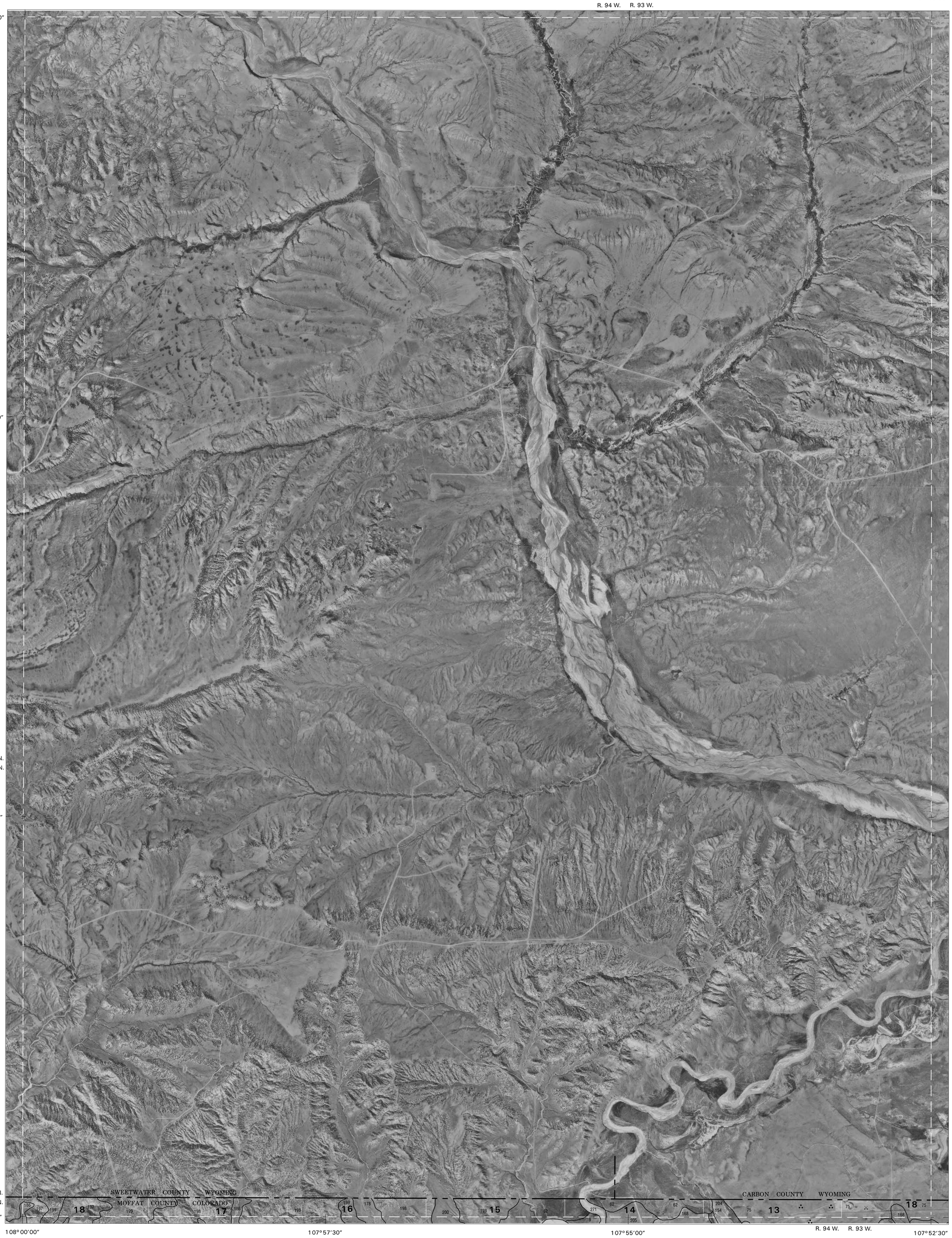
41°07′30″

41°05′00″

41°02′30″

41°00′00″

T. 13 N.
T. 12 N.



Joins sheet 2, Rotten Springs

Joins sheet 4, Poison Basin

SWEETWATER COUNTY WYOMING
MOFFAT COUNTY COLORADO
CARBON COUNTY WYOMING

18 17 16 15 14 13 18

Joins sheet 18, Bighole Butte

Joins sheet 17, The Nipple NE

Joins sheet 19, Thornburgh Gulch

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

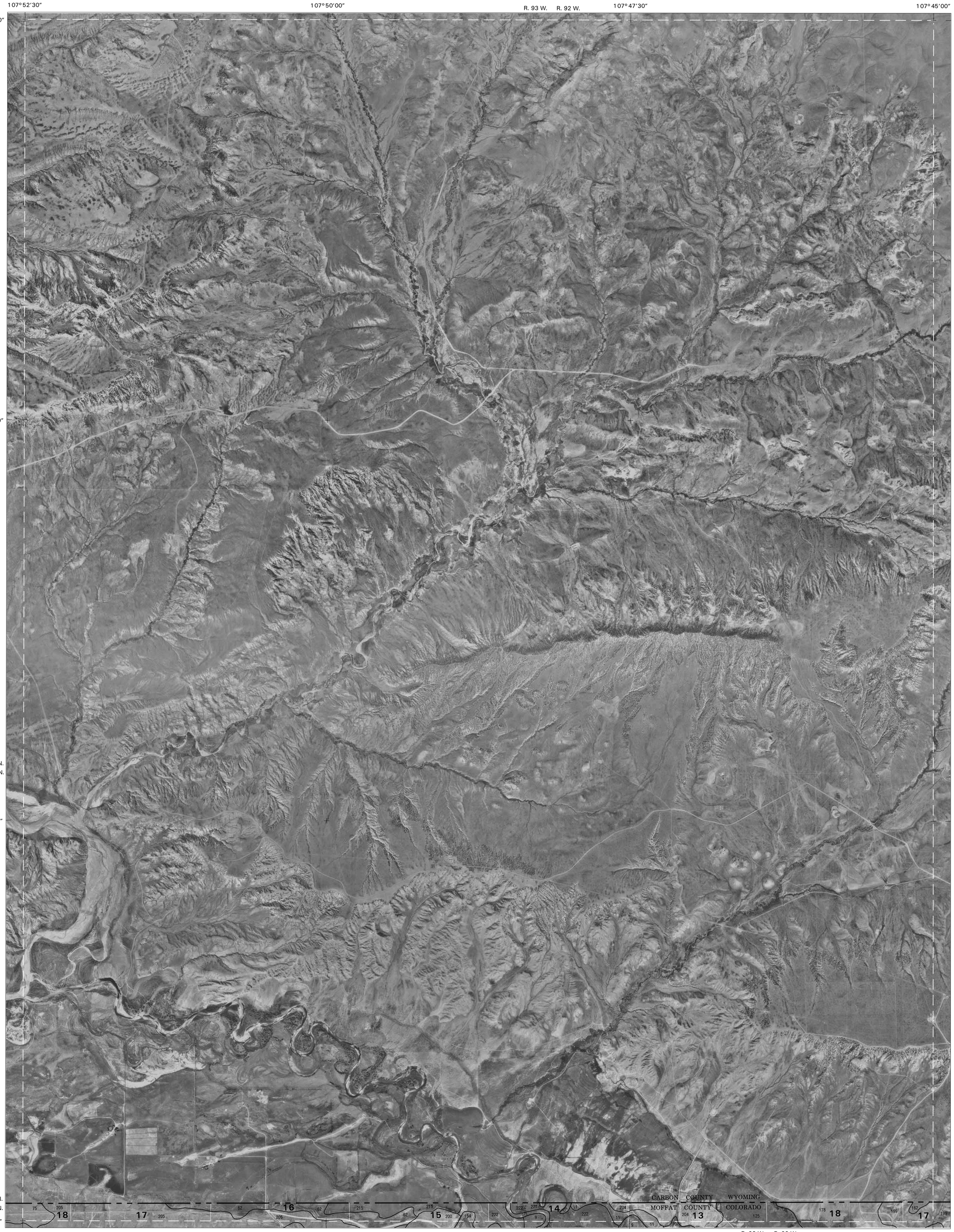
1 0 1
KILOMETERS

QUADRANGLE LOCATION

MCPHERSON SPRINGS, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 3 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
POISON BASIN QUADRANGLE
SHEET NUMBER 4 OF 110



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North American Datum of 1983 (NAD83). GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 13.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

POISON BASIN, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 4 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
BAGGS QUADRANGLE
SHEET NUMBER 5 OF 110

107°45′00″ 107°42′30″ R. 92 W. R. 91 W. 107°40′00″ 107°37′30″

41°07′30″ 41°05′00″ 41°02′30″ 41°00′00″

Joins sheet 4, Poison Basin

Joins sheet 6, Dixon

T. 13 N.
T. 12 N.
T. 12 N.

CARBON COUNTY WYOMING
MOFFAT COUNTY COLORADO

17 16 15 14 13 18 17

Joins sheet 19, Thornburgh Gulch

Joins sheet 20, Pole Gulch

Joins sheet 21, Fortification Hill

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

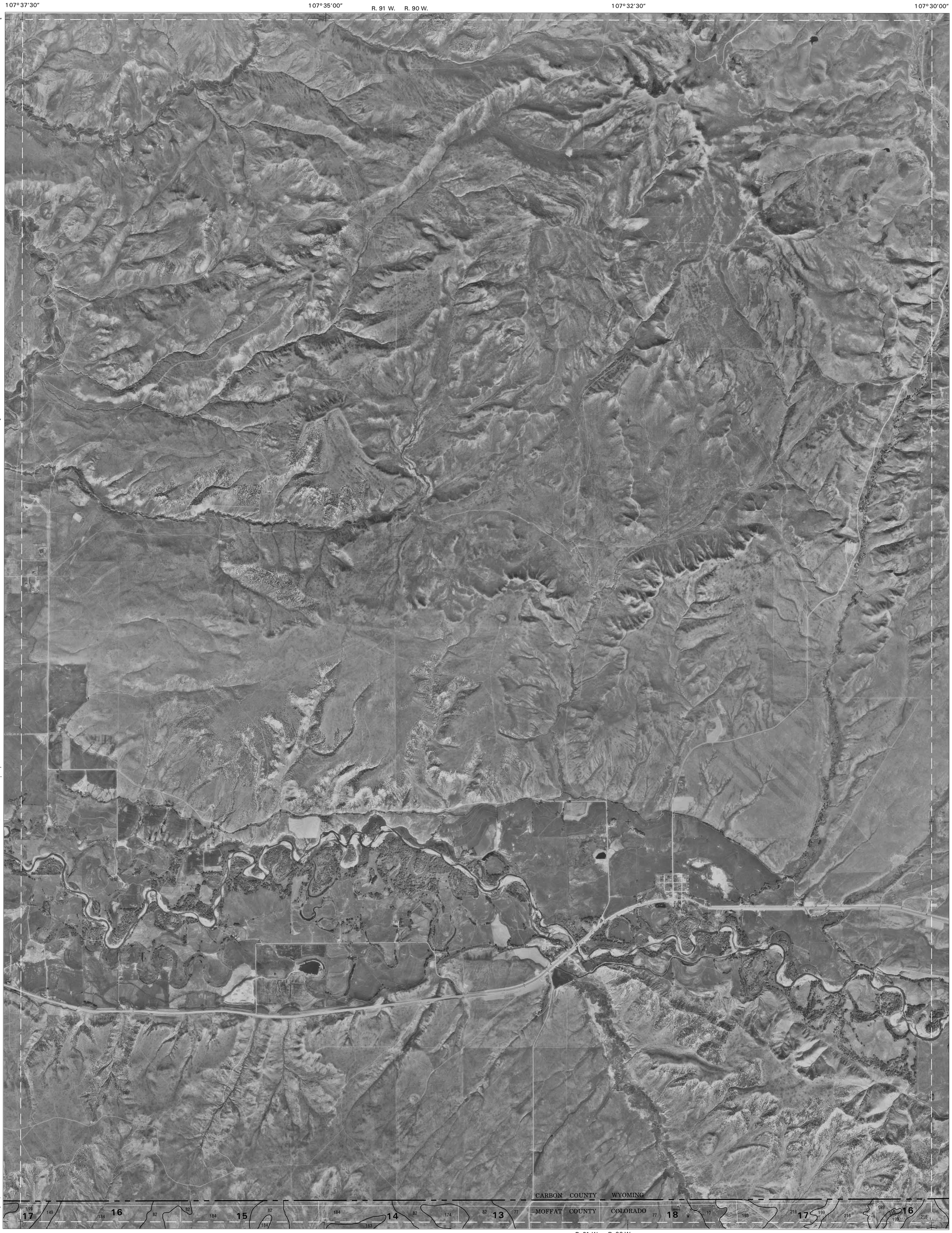
1 0 1
KILOMETERS

QUADRANGLE LOCATION

BAGGS, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 5 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
DIXON QUADRANGLE
SHEET NUMBER 6 OF 110



Joins sheet 20, Pole Gulch

Joins sheet 21, Fortification NE

Joins sheet 22, Bakers Peak

This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of the Interior, Geological Survey, from 1993-1995 aerial photography. Hydrography, culture, and public land survey system (PLSS) information were acquired from U.S. Geological Survey.

North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

MILES: 1 0 1

FEET: 1000 0 1000 2000 3000 4000 5000 6000 7000

KILOMETERS: 1 0 1

QUADRANGLE LOCATION

DIXON, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 6 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
SAVERY QUADRANGLE
SHEET NUMBER 7 OF 110

107°30′00″ 107°27′30″ 107°25′00″ 107°22′30″

R. 90 W. R. 89 W.

41°07′30″

41°05′00″

41°02′30″

41°00′00″

T. 13 N.
T. 12 N.

T. 12 N.

CARBON COUNTY WYOMING
MOFFAT COUNTY COLORADO

Joins sheet 6, Dixon

Joins sheet 8, Grieve Reservoir

Joins sheet 22, Bakers Peak

Joins sheet 21, Fortification NE

Joins sheet 23, Fry Creek

This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of the Interior, Geological Survey, from 1993-1995 aerial photography. Hydrography, culture, and public land survey system (PLSS) information were acquired from U.S. Geological Survey.

North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

SAVERY, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 7 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
GRIEVE RESERVOIR QUADRANGLE
SHEET NUMBER 8 OF 110

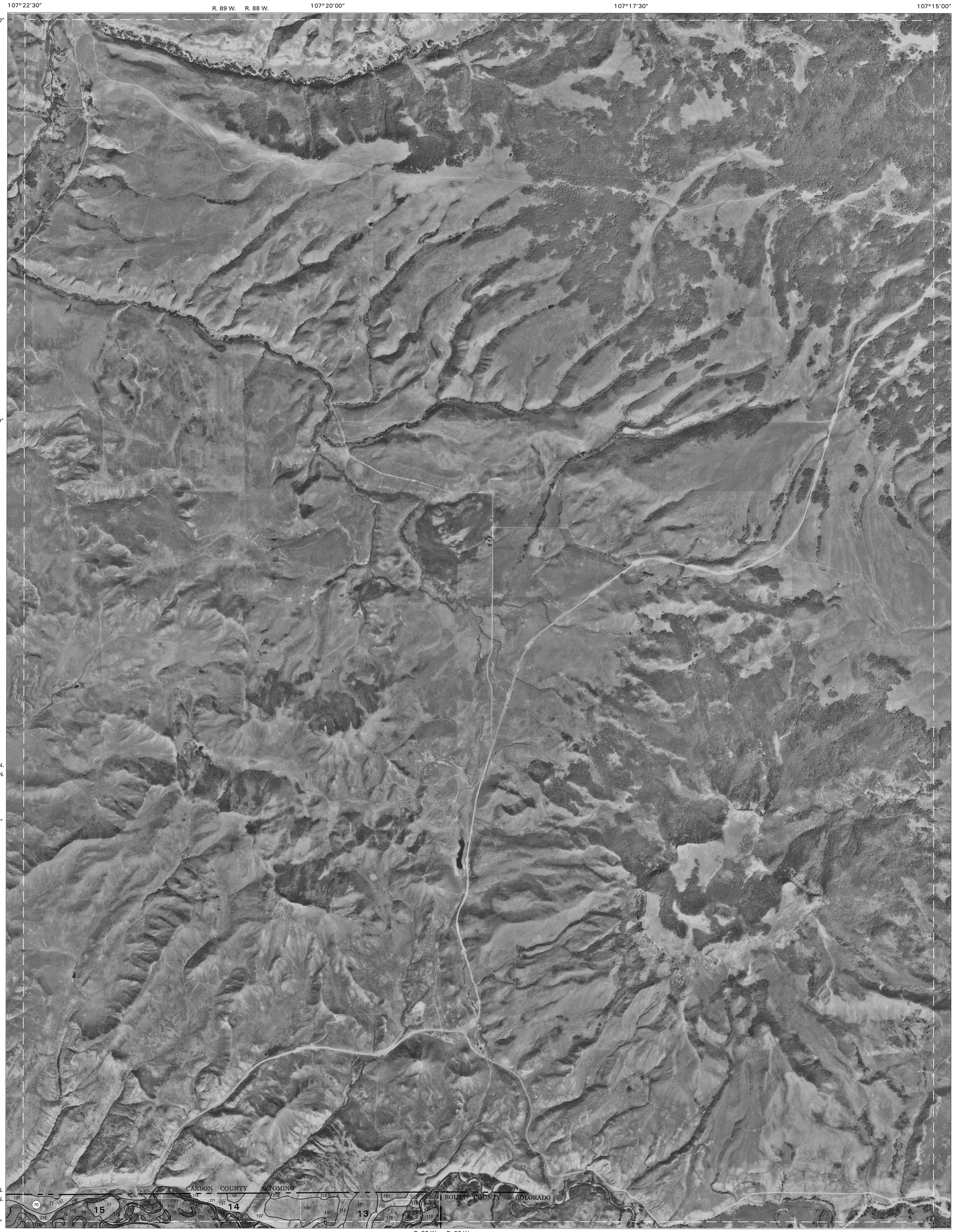
107°22′30″ — R. 89 W. — R. 88 W. — 107°20′00″ — 107°17′30″ — 107°15′00″

41°07′30″

41°05′00″

41°02′30″

41°00′00″



Joins sheet 7, Savery

T. 13 N.
T. 12 N.

T. 12 N.
T. 12 N.

Joins sheet 22, Bakers Peak

Joins sheet 23, Fly Creek

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

GRIEVE RESERVOIR, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 8 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
WILLOW CREEK BUTTE QUADRANGLE
SHEET NUMBER 9 OF 110

This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of the Interior, Geological Survey, from 1993-1995 aerial photography. Hydrography, culture, and public land survey system (PLSS) information were acquired from U.S. Geological Survey.

North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

WILLOW CREEK BUTTE, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 9 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
BEAVER BASIN QUADRANGLE
SHEET NUMBER 10 OF 110

109°00′00″ | 108°57′30″ | 108°55′00″ | 108°52′30″

R. 103 W. | R. 102 W.

SWEETWATER COUNTY WYOMING | MOFFAT COUNTY COLORADO

41°00′00″ | 40°57′30″ | T. 12 N. | T. 11 N. | 40°55′00″ | 40°52′30″

MIDDLE MOUNTAIN
BEAVER BASIN
COLD SPRING MOUNTAIN
Elk Meadow
Bishop Peak
Antone Gap
Rocky Reservoir
Diamond Peak
Johnson Draw
Johnson Flats
Birdie Gulch
MV Valley
Talamantes Creek
The Pines
Spitzie Draw
Skeltcher Creek
Beaver Creek
Bar 2 Creek

Joins sheet 9, Willow Creek Butte | *Joins sheet 11, Sparks* | *Joins sheet 24, Swallow Canyon* | *Joins sheet 25, Lodore School* | *Joins sheet 26, Big Joe Basin*

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1 MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 0 1 KILOMETERS

QUADRANGLE LOCATION

BEAVER BASIN, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 10 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
SPARKS QUADRANGLE
SHEET NUMBER 11 OF 110

108°52′30″ 108°50′00″ 108°47′30″ 108°45′00″

SWEETWATER COUNTY WYOMING | MOFFAT COUNTY COLORADO

R. 102 W. R. 101 W.

41°00′00″ 40°57′30″ 40°55′00″ 40°52′30″

T. 12 N.
T. 11 N.

DIAMOND FIELD
FONCE FLAT
FLATS
COLD SPRING MOUNTAIN
LIMESTONE RIDGE

Whiskey Draw
Johnson Draw
Draw
Draw Canyon
Field Draw
Diamond Draw
Fonce Creek
Wash
Hanging Tree Draw
Fisher Creek
Canyon Creek
Fonce Wash
Meadows Wash
Talamantes Creek
Sparks Creek
Fondillos Draw
Chokecherry Draw
Big Buck Draw
Buck Basin
Antone Canyon
Irish Canyon
Goodman Gulch

Fish Reservoirs

Joins sheet 10, Beaver Basin
Joins sheet 12, Sugarloaf Butte
Joins sheet 25, Ladore School
Joins sheet 26, Big Joe Basin
Joins sheet 27, Irish Canyon

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

MILES

FEET

KILOMETERS

QUADRANGLE LOCATION

SPARKS, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 11 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
SUGARLOAF BUTTE QUADRANGLE
SHEET NUMBER 12 OF 110

108°45′00″ 108°42′30″ 108°40′00″ 108°37′30″

SWEETWATER COUNTY WYOMING R. 101 W. R. 100 W.

MOFFAT COUNTY COLORADO

41°00′00″

40°57′30″

T. 12 N.
T. 11 N.

40°55′00″

40°52′30″

FONCE FLAT

Fonce Lake

Fonce Wash

Canyon Wash

Creek

Vermilion Creek

G Lake

Sugarloaf Butte

Talamantes Creek

Joins sheet 11, Sparks

Joins sheet 13, Hiawatha

Joins sheet 26, Big Joe Basin

Joins sheet 27, Irish Canyon

Joins sheet 28, G Spring

This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of the Interior, Geological Survey, from 1993-1995 aerial photography. Hydrography, culture, and public land survey system (PLSS) information were acquired from U.S. Geological Survey.

North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1 MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 0 1 KILOMETERS

QUADRANGLE LOCATION

SUGARLOAF BUTTE, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 12 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
HIAWATHA QUADRANGLE
SHEET NUMBER 13 OF 110

108°37′30″ 108°35′00″ 108°32′30″ 108°30′00″

R. 100 W. R. 99 W.

SWEETWATER COUNTY WYOMING

MOFFAT COUNTY COLORADO

41°00′00″

40°57′30″

T. 12 N.
T. 11 N.

40°55′00″

40°52′30″

Hiawatha

Hells Canyon

Shell Creek

Vermilion Creek

Dry Creek

Joins sheet 12, Sugarloaf Butte

Joins sheet 14, Coffeepot Spring

Joins sheet 27, Irish Canyon

Joins sheet 28, G Spring

Joins sheet 29, Stephenhagen Springs

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North American Datum of 1983 (NAD83), GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

HIAWATHA, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 13 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
COFFEEPOT SPRING QUADRANGLE
SHEET NUMBER 14 OF 110

108°30′00″ — 108°27′30″ — 108°25′00″ — 108°22′30″

R. 99 W. — R. 98 W.

SWEETWATER COUNTY WYOMING

MOFFAT COUNTY COLORADO

41°00′00″

40°57′30″

T. 12 N.
T. 11 N.

40°55′00″

40°52′30″

Creek

Shell

Racetrack Flat

Eagle Rock Draw

Draw

Slide

Beaver

Creek

Dry

BLUFFS

VERMILLION

Yellow Cat Wash

Joins sheet 13, Hiawatha

Joins sheet 15, Powder Wash

Joins sheet 28, G Spring

Joins sheet 29, Sheepherder Springs

Joins sheet 30, Lang Spring

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

COFFEEPOT SPRING, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 14 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
POWDER WASH QUADRANGLE
SHEET NUMBER 15 OF 110

Joins sheet 1, Powder Mountain

108°22′30″ — SWEETWATER COUNTY WYOMING R. 98 W. R. 97 W. — 108°20′00″ — 108°17′30″ — 108°15′00″

41°00′00″

MOFFAT COUNTY COLORADO

40°57′30″

T. 12 N.
T. 11 N.

40°55′00″

40°52′30″

Joins sheet 14, Coffeepot Spring

Joins sheet 16, Reservoir Draw

Rock Draw
Eagle Draw
Beaver Slide Draw
Powder Wash
Hole in the Ace Draw
Powder Wash
Draw
Hole in the Ace

Joins sheet 29, Sheepherder Springs

Joins sheet 30, Lang Spring

Joins sheet 31, The Nipple

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

POWDER WASH, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 15 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
RESERVOIR DRAW QUADRANGLE
SHEET NUMBER 16 OF 110

108°15′00″ 108°12′30″ 108°10′00″ 108°07′30″

41°00′00″ 40°57′30″ T. 12 N. T. 11 N. 40°55′00″ 40°52′30″

R. 97 W. R. 96 W. SWEETWATER COUNTY WYOMING MOFFAT COUNTY CO

Joins sheet 1, Powder Mountain

Joins sheet 2, Rotten Springs

Joins sheet 15, Powder Wash

Joins sheet 17, The Nipple NE

Joins sheet 30, Lang Spring

Joins sheet 31, The Nipple

Joins sheet 32, The Nipple SE

Powder Wash Draw Reservoir Draw Horse Draw Rudloff Draw Little Snake River

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1 MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 0 1 KILOMETERS

QUADRANGLE LOCATION

RESERVOIR DRAW, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 16 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
THE NIPPLE NE QUADRANGLE
SHEET NUMBER 17 OF 110

Joins sheet 1, Powder Mountain

Joins sheet 2, Rotten Springs

Joins sheet 3, McPherson Springs

108°07′30″ — 108°05′00″ — 108°02′30″ — 108°00′00″

R. 96 W. — R. 95 W. — R. 95 W. — R. 94 W.

41°00′00″

40°57′30″

T. 12 N.
T. 11 N.

40°55′00″

40°52′30″

Joins sheet 16, Reservoir Draw

Joins sheet 18, Bighole Butte

Joins sheet 31, The Nipple

Joins sheet 32, The Nipple SE

Joins sheet 33, Mayberry Spring

Powder Wash

Powder

West

LITTLE SNAKE RIVER

SNAKE RIVER

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

THE NIPPLE NE, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 17 OF 110

Joins sheet 2, Porter Springs

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

Joins sheet 3, McPherson Springs

MOFFAT COUNTY AREA, COLORADO
BIGHOLE BUTTE QUADRANGLE
SHEET NUMBER 18 OF 110

Joins sheet 4, Poison Basin

108°00′00″ 107°57′30″ 107°55′00″ R. 94 W. R. 93 W. 107°52′30″

41°00′00″ 40°57′30″ T. 12 N. T. 11 N. 40°55′00″ 40°52′30″

Joins sheet 17, The Nipple NE

Joins sheet 19, Thornburgh Gulch

Joins sheet 32, The Nipple SE

Joins sheet 33, Mayberry Spring

Joins sheet 34, Great Divide

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

MILES

FEET

KILOMETERS

QUADRANGLE LOCATION

BIGHOLE BUTTE, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 18 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
THORNBURGH GULCH QUADRANGLE
SHEET NUMBER 19 OF 110

107°52′30″ 107°50′00″ 107°47′30″ R. 93 W. R. 92 W. 107°45′00″

41°00′00″ 40°57′30″ T. 12 N. T. 11 N. 40°55′00″ 40°52′30″

Joins sheet 18, Bighole Butte

Joins sheet 20, Pole Gulch

LITTLE SNAKE RIVER
Tommys Gulch
Woodbury Gulch
Thornburgh Gulch
Dry Gulch
Scandinavian Gulch

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

THORNBURGH GULCH, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 19 OF 110

Joins sheet 4, Poison Basin

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

Joins sheet 5, Baggs

MOFFAT COUNTY AREA, COLORADO
POLE GULCH QUADRANGLE
SHEET NUMBER 20 OF 110

Joins sheet 6, Dixon

107°45′00″ | 107°42′30″ | 107°40′00″ | R. 92 W. | R. 91 W. | 107°37′30″

41°00′00″

40°57′30″

T. 12 N.
T. 11 N.

40°55′00″

40°52′30″

Joins sheet 19, Thornburgh Gulch

Joins sheet 21, Fortification NE

Joins sheet 34, Great Divide

Joins sheet 35, East Timberlake Creek

Joins sheet 36, Fortification

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

POLE GULCH, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 20 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
FORTIFICATION NE QUADRANGLE
SHEET NUMBER 21 OF 110

Joins sheet 5, Badgro

Joins sheet 6, Dixon

Joins sheet 7, Savery

107°37′30″ 107°35′00″ 107°32′30″ 107°30′00″

R. 91 W. R. 90 W.

41°00′00″

40°57′30″

T. 12 N.
T. 11 N.

40°55′00″

40°52′30″

Joins sheet 20, Pole Gulch

Joins sheet 22, Bakers Peak

Joins sheet 35, East Timberlake Creek

Joins sheet 36, Fortification

Joins sheet 37, Freeman Reservoir

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

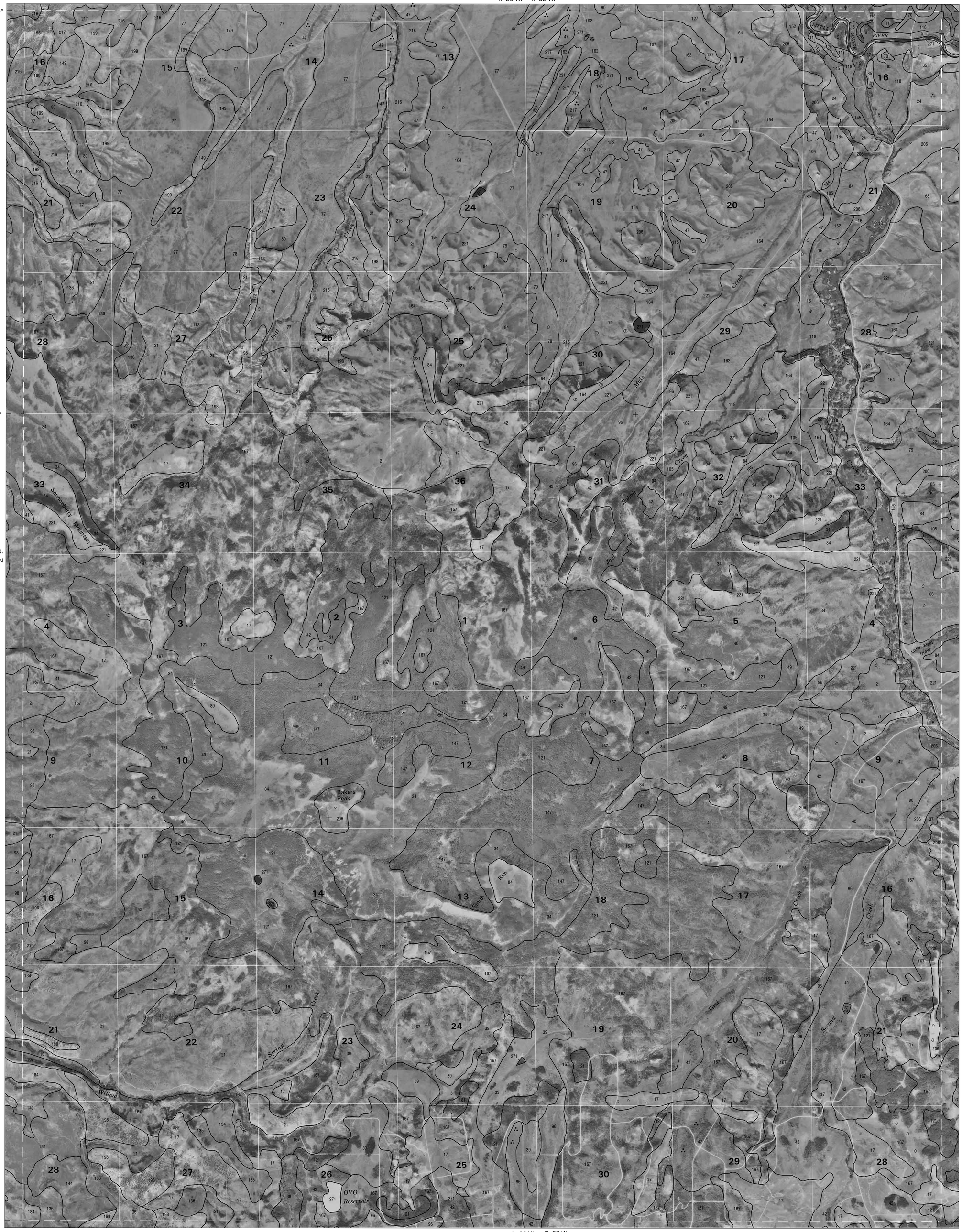
1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

FORTIFICATION NE, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 21 OF 110



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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

BAKERS PEAK, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 22 OF 110

Joins sheet 7, Savery

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
FLY CREEK QUADRANGLE
SHEET NUMBER 23 OF 110

Joins sheet 8, Grieve Reservoir

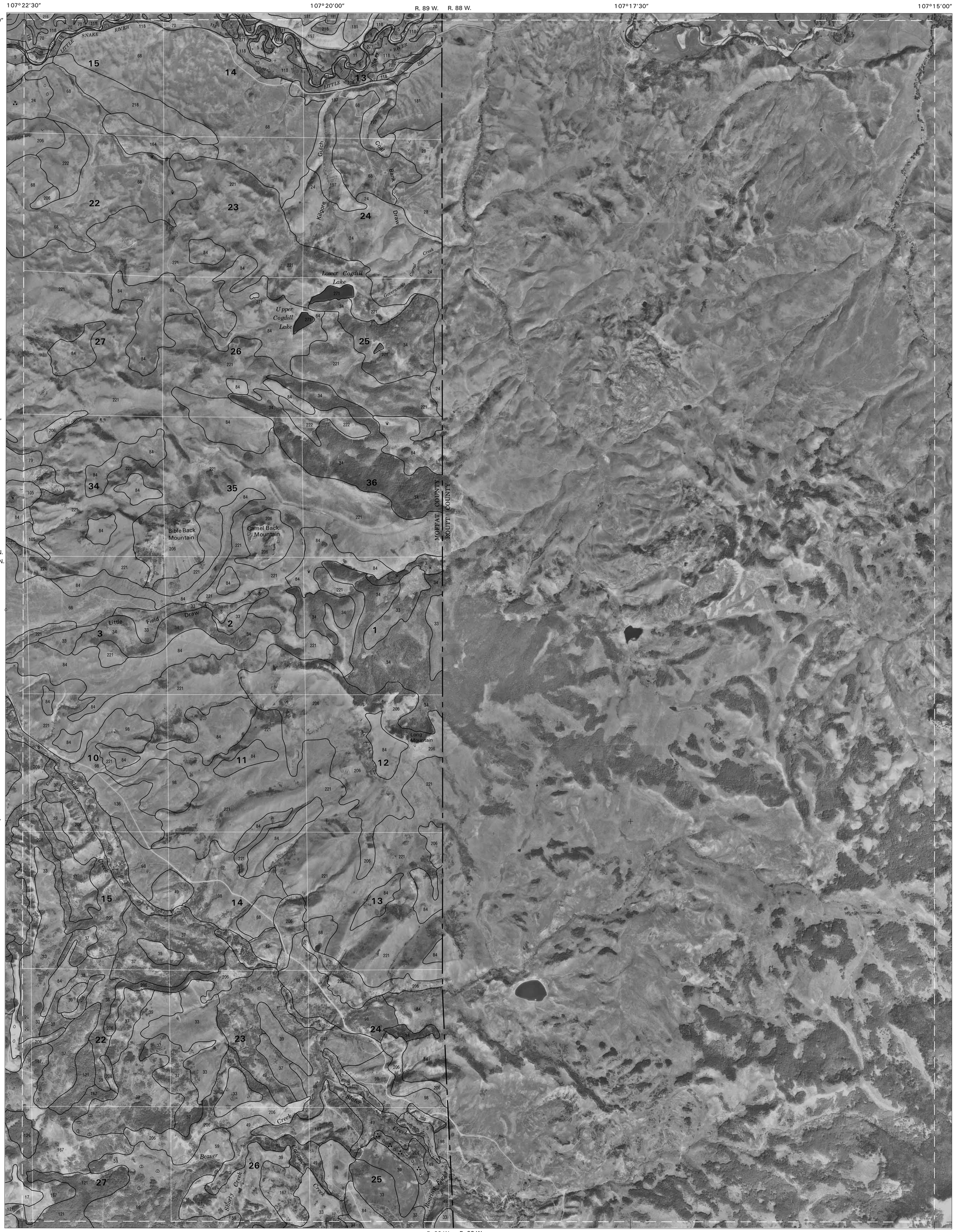
107°22′30″ 107°20′00″ R. 89 W. R. 88 W. 107°17′30″ 107°15′00″

41°00′00″ 40°57′30″ T. 12 N. T. 11 N. 40°55′00″ 40°52′30″

Joins sheet 22, Bakers Peak

Joins sheet 37, Freeman Reservoir

Joins sheet 38, Buck Point



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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1 MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 0 1 KILOMETERS

QUADRANGLE LOCATION

FLY CREEK, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 23 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
SWALLOW CANYON QUADRANGLE
SHEET NUMBER 24 OF 110

Joins sheet 9, Willow Creek Butte

Joins sheet 10, Beaver Basin

Joins sheet 25, Ladore School

Joins sheet 39, Hoy Mountain

Joins sheet 40, Canyon of Lodore North

This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of the Interior, Geological Survey, from 1993-1995 aerial photography. Hydrography, culture, and public land survey system (PLSS) information were acquired from U.S. Geological Survey.

North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

MILES

FEET

KILOMETERS

QUADRANGLE LOCATION

SWALLOW CANYON, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 24 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
LODORE SCHOOL QUADRANGLE
SHEET NUMBER 25 OF 110

Joins sheet 9, Willow Creek Butte
Joins sheet 10, Beaver Basin
Joins sheet 11, Sparks
Joins sheet 24, Swallow Canyon
Joins sheet 26, Big Joe Basin
Joins sheet 39, Hoy Mountain
Joins sheet 40, Canyon of Lodore North
Joins sheet 41, Jack Springs

109°00′00″ 108°57′30″ 108°55′00″ 108°52′30″
R. 103 W. R. 102 W.
40°52′30″ 40°50′00″ 40°47′30″ 40°45′00″
T. 11 N. T. 10 N. T. 9 N.

BROWNS Draw
Spitzie
Goodman Gulch
Hog Lake
GREEN RIVER
PARK
Goodman
Gulch
Chokecherry Draw
Yellow Jacket Draw
Draw
Warren Draw
Draw
Draw
Draw
GREEN RIVER
Davis
Hoy
DIAMOND MOUNTAIN
Vermillion Creek

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES
1000 0 1000 2000 3000 4000 5000 6000 7000
FEET
1 0 1
KILOMETERS

QUADRANGLE LOCATION

LODORE SCHOOL, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 25 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
BIG JOE BASIN QUADRANGLE
SHEET NUMBER 26 OF 110

Joins sheet 10, Beaver Basin
Joins sheet 11, Sparks
Joins sheet 12, Sugarloaf Butte
Joins sheet 25, Lodore School
Joins sheet 27, Irish Canyon
Joins sheet 40, Canyon of Lodore North
Joins sheet 41, Jack Springs
Joins sheet 42, Vermilion Mesa

108°52′30″ 108°50′00″ R. 102 W. R. 101 W. 108°47′30″ 108°45′00″

40°52′30″ T. 11 N. T. 10 N.

40°50′00″

T. 10 N. T. 9 N. 40°47′30″

40°45′00″

Goodman Gulch
Limestone Gap
COLD SPRING
LIMESTONE MOUNTAIN RIDGE
BIG JOE BASIN
Peekaboo Ridge
Green Canyon
Little Joe Basin
BROWNS PARK
Vermilion Creek
Bull Canyon
Middle Creek

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1 MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 0 1 KILOMETERS

QUADRANGLE LOCATION

BIG JOE BASIN, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 26 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
IRISH CANYON QUADRANGLE
SHEET NUMBER 27 OF 110

Joins sheet 11, Sparks
Joins sheet 12, Sugarloaf Butte
Joins sheet 13, Havatha
Joins sheet 26, Big Joe Basin
Joins sheet 28, G Spring
Joins sheet 41, Jack Springs
Joins sheet 42, Vermillion Mesa
Joins sheet 43, Sheephead Basin

108°45′00″ 108°42′30″ R. 101 W. R. 100 W. 108°40′00″ 108°37′30″

40°52′30″ T. 11 N. T. 10 N. 40°50′00″ 40°47′30″ T. 10 N. T. 9 N. 40°45′00″

Blue Hill
Vermillion Creek
Dry Creek
COLD SPRING Limestone Ridge
IRISH CANYON
MOUNTAIN

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

IRISH CANYON, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 27 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
G SPRING QUADRANGLE
SHEET NUMBER 28 OF 110

Joins sheet 12, Sugarloaf Butte
Joins sheet 13, Hiawatha
Joins sheet 14, Coffeepot Spring
Joins sheet 27, Irish Canyon
Joins sheet 29, Sheepherder Springs
Joins sheet 42, Vermilion Mesa
Joins sheet 43, Sheephead Basin
Joins sheet 44, Clay Buttes

108°37′30″ 108°35′00″ R. 100 W. R. 99 W. 108°32′30″ 108°30′00″

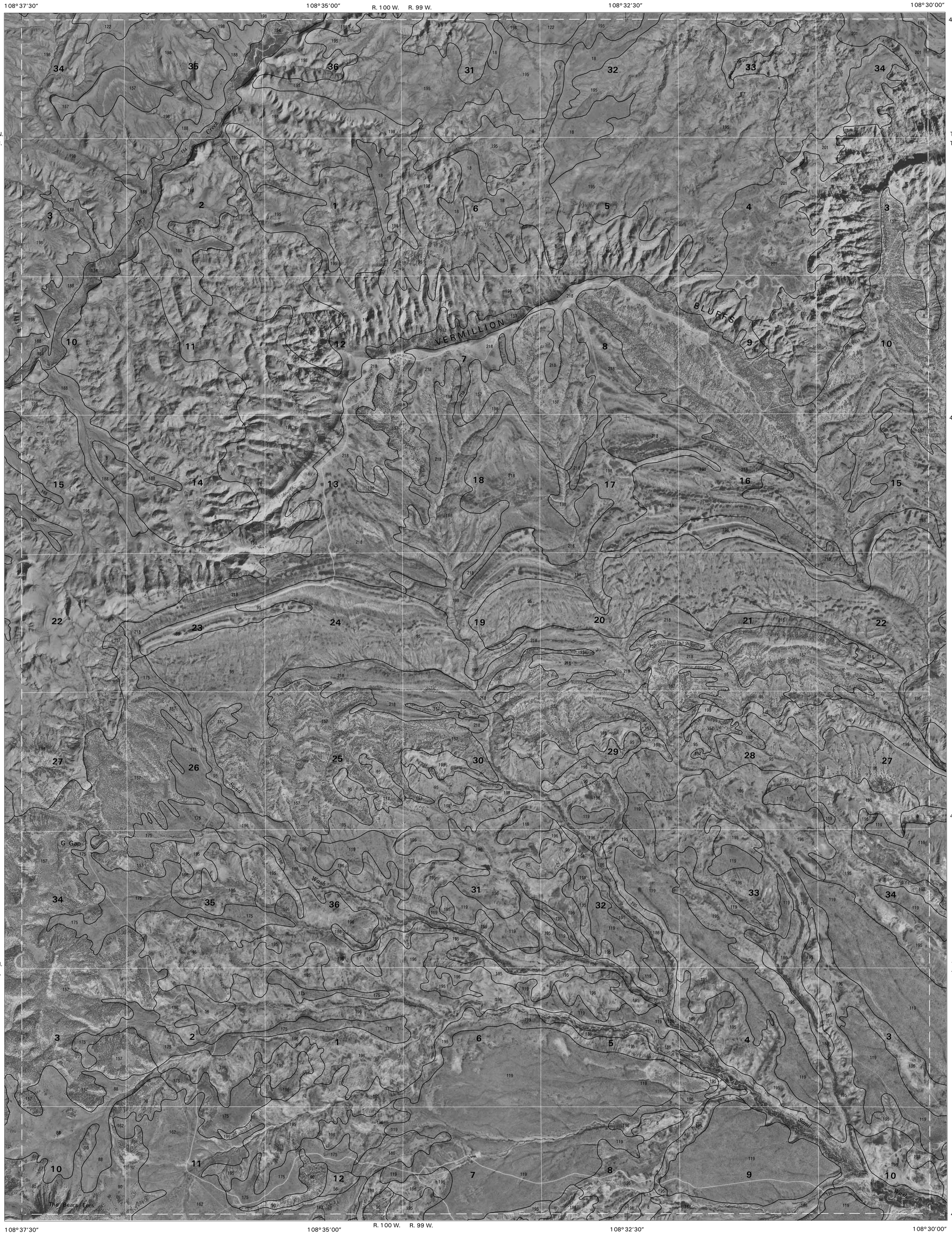
40°52′30″ T. 11 N. T. 10 N.

40°50′00″

40°47′30″

T. 10 N. T. 9 N.

40°45′00″



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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

MILES

FEET

KILOMETERS

QUADRANGLE LOCATION

G SPRING, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 28 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
SHEEPHERDER SPRINGS QUADRANGLE
SHEET NUMBER 29 OF 110

Joins sheet 13, Hiawatha
Joins sheet 14, Coffeepot Spring
Joins sheet 15, Powder Wash
Joins sheet 28, G Spring
Joins sheet 30, Lang Spring
Joins sheet 43, Sheephead Basin
Joins sheet 44, Clay Buttes
Joins sheet 45, Serenville Draw

108°30′00″ | 108°27′30″ | 108°25′00″ | 108°22′30″
R. 99 W. R. 98 W.
40°52′30″ | 40°50′00″ | 40°47′30″ | 40°45′00″
T. 11 N. | T. 10 N. | T. 9 N.

BLUFFS
VERMILLION
Lookout Mountain
Lake
Draw
Sheepherder
Springs
Draw
Twin Buttes
Sand Wash

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

MILES: 1 0 1
FEET: 1000 0 1000 2000 3000 4000 5000 6000 7000
KILOMETERS: 1 0 1

QUADRANGLE LOCATION

SHEEPHERDER SPRINGS, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 29 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
LANG SPRING QUADRANGLE
SHEET NUMBER 30 OF 110

Joins sheet 14, Coffeepot Spring
Joins sheet 15, Powder Wash
Joins sheet 16, Reservoir Draw
Joins sheet 29, Sheepherder Springs
Joins sheet 31, The Nipple
Joins sheet 44, Clay Buttes
Joins sheet 45, Sevenmile Draw
Joins sheet 46, Naturita Hill

108°22′30″ R. 98 W. R. 97 W. 108°20′00″ 108°17′30″ 108°15′00″

40°52′30″ T. 11 N. T. 10 N. 40°50′00″ 40°47′30″ T. 10 N. T. 9 N. 40°45′00″

Lake Draw
Yahoo Cut Wash
Spence Gulch
Draw
Dugout Draw
Sevenmile Ridge
Sevenmile Draw
Yahoo Draw

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1 MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 0 1 KILOMETERS

QUADRANGLE LOCATION

LANG SPRING, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 30 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
THE NIPPLE QUADRANGLE
SHEET NUMBER 31 OF 110

Joins sheet 15, Powder Wash

Joins sheet 16, Reservoir Draw

Joins sheet 17, The Nipple NE

108°15′00″ R. 97 W. R. 96 W. 108°12′30″ 108°10′00″ 108°07′30″

40°52′30″ T. 11 N. T. 10 N. 40°50′00″ 40°47′30″ T. 10 N. T. 9 N. 40°45′00″

Joins sheet 30, Lang Spring

Joins sheet 32, The Nipple SE

Joins sheet 45, Sevenmile Draw

Joins sheet 46, Ninemile Hill

Joins sheet 47, Bald Mountain

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1 MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 0 1 KILOMETERS

QUADRANGLE LOCATION

THE NIPPLE, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 31 OF 110

Joins sheet 16, Reservoir Draw

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
THE NIPPLE SE QUADRANGLE
SHEET NUMBER 32 OF 110

Joins sheet 18, Bighole Butte

Joins sheet 17, The Nipple NE

108° 07′ 30″ — 108° 05′ 00″ — 108° 02′ 30″ — 108° 00′ 00″
R. 96 W. — R. 95 W. — R. 95 W. — R. 94 W.
40° 52′ 30″ — 40° 50′ 00″ — 40° 47′ 30″ — 40° 45′ 00″
T. 11 N. / T. 10 N. / T. 9 N.

Greasewood Gulch
Greasewood
Red Wash
Red Wash Butte

Joins sheet 31, The Nipple

Joins sheet 33, Mayberry Spring

Joins sheet 46, Ninemile Hill

Joins sheet 47, Bald Mountain

Joins sheet 48, Alkali Springs

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North American Datum of 1983 (NAD83), GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 12.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

MILES: 1 0 1
FEET: 1000 0 1000 2000 3000 4000 5000 6000 7000
KILOMETERS: 1 0 1

QUADRANGLE LOCATION

THE NIPPLE SE, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 32 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
MAYBERRY SPRING QUADRANGLE
SHEET NUMBER 33 OF 110

Joins sheet 17, The Nipple NE
Joins sheet 18, Bighole Butte
Joins sheet 19, Thornburgh Gulch
Joins sheet 32, The Nipple SE
Joins sheet 34, Great Divide
Joins sheet 47, Bald Mountain
Joins sheet 48, Adobe Springs
Joins sheet 49, Iron Springs

108°00′00″ 107°57′30″ 107°55′00″ R. 94 W. R. 93 W. 107°52′30″

40°52′30″ T. 11 N. T. 10 N. 40°50′00″ 40°47′30″ T. 10 N. T. 9 N. 40°45′00″

Bighole Gulch
Bighole
Gulch
Greasewood Gulch
Greasewood
Gulch

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1 MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 0 1 KILOMETERS

QUADRANGLE LOCATION

MAYBERRY SPRING, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 33 OF 110

Joins sheet 18, Bighole Butte

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
GREAT DIVIDE QUADRANGLE
SHEET NUMBER 34 OF 110

Joins sheet 20, Pole Gulch

Joins sheet 19, Thornburgh Gulch

107°52′30″ 107°50′00″ 107°47′30″ R. 93 W. R. 92 W. 107°45′00″

40°52′30″ T. 11 N. T. 10 N.

40°50′00″

Joins sheet 33, Mayberry Spring

Joins sheet 35, East Timberlake Creek

40°47′30″ T. 10 N. T. 9 N.

40°45′00″

Joins sheet 48, Adobe Springs

Joins sheet 49, Iron Springs

Joins sheet 50, Craig NW

Scandinavian Gulch
D'V Gulch
Great Divide Gulch
Bighole

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

GREAT DIVIDE, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 34 OF 110

Joins sheet 19, Thornburgh Gulch

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

Joins sheet 20, Pole Gulch

MOFFAT COUNTY AREA, COLORADO
EAST TIMBERLAKE CREEK QUADRANGLE
SHEET NUMBER 35 OF 110

Joins sheet 21, Fortification NE

107°45′00″ 107°42′30″ 107°40′00″ R. 92 W. R. 91 W. 107°37′30″

40°52′30″ T. 11 N. T. 10 N.

40°50′00″

40°47′30″ T. 10 N. T. 9 N.

40°45′00″

Timberlake Creek

Gulch

House

Joins sheet 34, Great Divide

Joins sheet 36, Fortification

Joins sheet 49, Iron Springs

Joins sheet 50, Craig NW

Joins sheet 51, Craig NE

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1 MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 0 1 KILOMETERS

QUADRANGLE LOCATION

EAST TIMBERLAKE CREEK, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 35 OF 110

Joins sheet 20, Pole Gulch

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
FORTIFICATION QUADRANGLE
SHEET NUMBER 36 OF 110

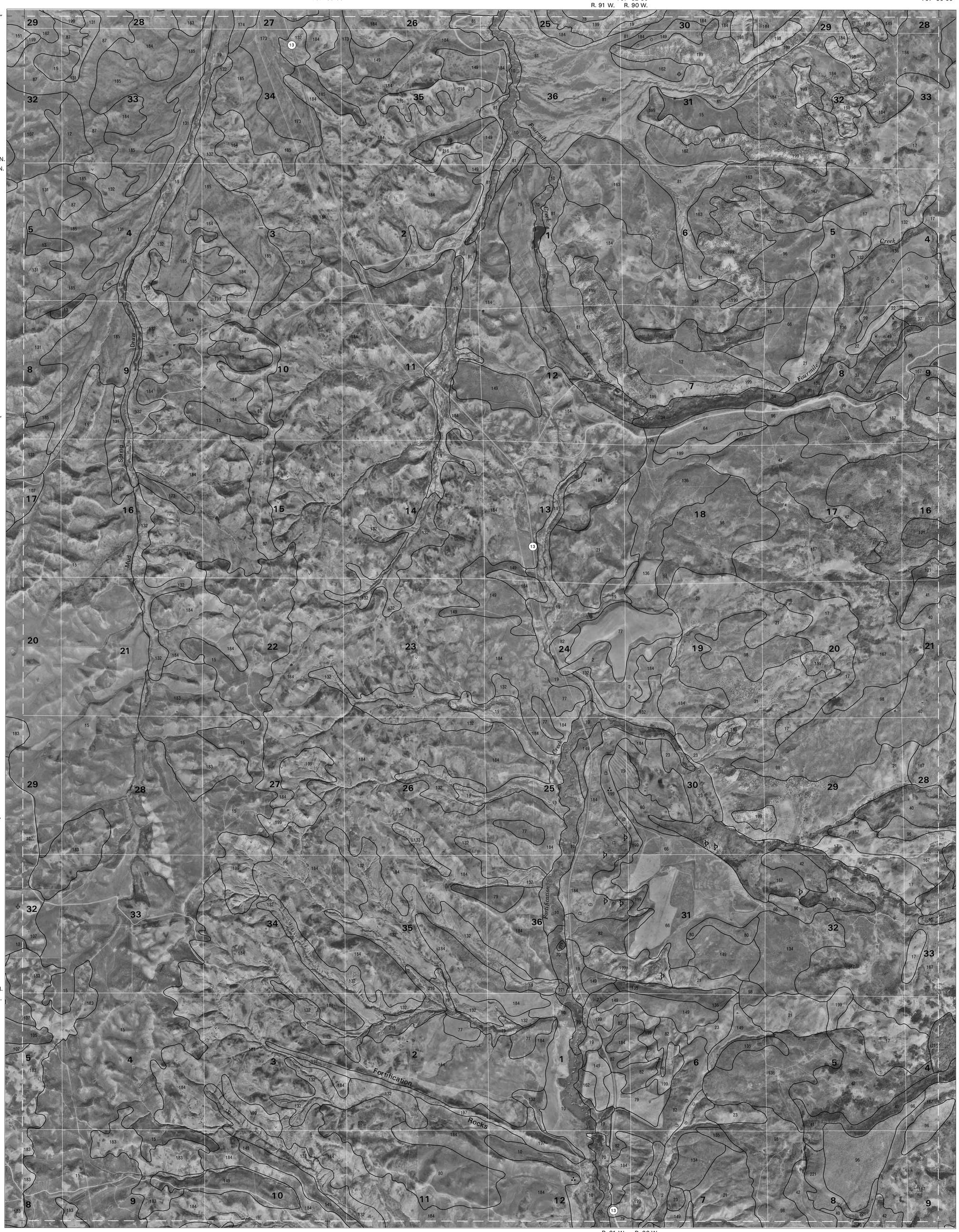
Joins sheet 22, Bakers Peak

Joins sheet 21, Fortification NE

107°37′30″ 107°35′00″ 107°32′30″ 107°30′00″

R. 91 W. R. 90 W.

40°52′30″ T. 11 N. T. 10 N. 40°50′00″ 40°47′30″ T. 10 N. T. 9 N. 40°45′00″



Joins sheet 35, East Timberlake Creek

Joins sheet 37, Freeman Reservoir

Joins sheet 50, Craig NW

Joins sheet 51, Craig NE

Joins sheet 52, Michaud Mesa

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

FORTIFICATION, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 36 OF 110

Joins sheet 21, Fortification NE

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
FREEMAN RESERVOIR QUADRANGLE
SHEET NUMBER 37 OF 110

Joins sheet 23, Fly Creek

Joins sheet 22, Bakers Peak

107°30′00″ 107°27′30″ R. 90 W. R. 89 W. 107°25′00″ 107°22′30″

40°52′30″ T. 11 N. T. 10 N. 40°50′00″ 40°47′30″ T. 10 N. T. 9 N. 40°45′00″

ROUTT NATIONAL FOREST

Willow Creek
Second Creek
Fourmile Creek
Martin Cull Reservoir
Little Cottonwood Creek

Joins sheet 36, Fortification

Joins sheet 38, Buck Point

Joins sheet 52, McInturf Mesa

Joins sheet 51, Craig NE

Joins sheet 53, Slide Mountain

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

FREEMAN RESERVOIR, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 37 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
BUCK POINT QUADRANGLE
SHEET NUMBER 38 OF 110

Joins sheet 22, Bakers Peak

Joins sheet 23, Fly Creek

107°22′30″ 107°20′00″ R. 89 W. R. 88 W. 107°17′30″ 107°15′00″

40°52′30″ 40°50′00″ 40°47′30″ 40°45′00″

T. 11 N.
T. 10 N.
T. 10 N.
T. 9 N.

27 26 25 33 34 35 36

Creek Shorty Creek Beaver Creek Cataract Creek Roaring Fork Beaver Creek

MOFFAT COUNTY
ROUTT COUNTY

ROUTT NATIONAL FOREST

Joins sheet 37, Freeman Reservoir

Joins sheet 52, McInturf Mesa

Joins sheet 53, Slide Mountain

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

BUCK POINT, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 38 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
HOY MOUNTAIN QUADRANGLE
SHEET NUMBER 39 OF 110

Joins sheet 24, Swallow Canyon
Joins sheet 25, Lodore School
Joins sheet 40, Canyon of Lodore North
Joins sheet 54, Jones Hole
Joins sheet 55, Canyon of Lodore South

109° 07′ 30″ | 109° 05′ 00″ | R. 25 E. | R. 104 W. | 109° 02′ 30″ | R. 104 W. | R. 103 W. | 109° 00′ 00″

40° 45′ 00″
40° 42′ 30″
T. 1 S.
T. 2 S.
T. 9 N.
T. 8 N.
40° 40′ 00″
40° 37′ 30″

UTAH COLORADO
DAGGETT COUNTY | MOFFAT COUNTY
UINTAH COUNTY
SOIL SURVEY LIMIT OF

HOY MOUNTAIN
WILD MOUNTAIN
Pot Creek
Pot Creek
Oil Field Reservoir
Lodore School

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

MILES: 1 0 1
FEET: 1000 0 1000 2000 3000 4000 5000 6000 7000
KILOMETERS: 1 0 1

QUADRANGLE LOCATION

HOY MOUNTAIN, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 39 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
CANYON OF LODORE NORTH QUADRANGLE
SHEET NUMBER 40 OF 110

Joins sheet 24, Swallow Canyon
Joins sheet 25, Lodore School
Joins sheet 26, Big Joe Basin
Joins sheet 39, Hoy Mountain
Joins sheet 41, Jack Springs
Joins sheet 54, Jones Hole
Joins sheet 55, Canyon of Lodore South
Joins sheet 56, Zenobia Peak

109°00′00″ 108°57′30″ 108°55′00″ 108°52′30″
R. 103 W. R. 102 W.
40°45′00″ 40°42′30″ 40°40′00″ 40°37′30″
T. 9 N.
T. 8 N.

Draw, Davis, DIAMOND, Hoy, Flat, Craig, Dry Creek, Tuttle Reservoir, Deerlick, MOUNTAIN, Offield, Mountain, Pot, Creek, Offield Reservoir, Eckhild, Ridge, Black, Browns, Park, GREEN RIVER, SURVEY, SOIL, LIMIT

DINOSAUR
NATIONAL
MONUMENT

This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of the Interior, Geological Survey, from 1993-1995 aerial photography. Hydrography, culture, and public land survey system (PLSS) information were acquired from U.S. Geological Survey.

North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

CANYON OF LODORE NORTH, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 40 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
JACK SPRINGS QUADRANGLE
SHEET NUMBER 41 OF 110

Joins sheet 25, Lodore School

Joins sheet 26, Big Joe Basin

Joins sheet 27, Irish Canyon

108°52′30″ | 108°50′00″ | R. 102 W. | R. 101 W. | 108°47′30″ | 108°45′00″

40°45′00″ | 40°42′30″ | 40°40′00″ | 40°37′30″

T. 9 N.
T. 8 N.

Joins sheet 40, Canyon of Lodore North

Joins sheet 42, Vermilion Mesa

Joins sheet 55, Canyon of Lodore South

Joins sheet 56, Zenobia Peak

Joins sheet 57, Greystone

DINOSAUR NATIONAL MONUMENT

Conway Draw

Vermilion Creek

Rye Grass Draw

Jack Springs Draw

Cottonwood Creek

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

JACK SPRINGS, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 41 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
VERMILLION MESA QUADRANGLE
SHEET NUMBER 42 OF 110

Joins sheet 26, Big Joe Basin

Joins sheet 27, Irish Canyon

Joins sheet 28, G Spring

108° 45′ 00″ | 108° 42′ 30″ | R. 101 W. R. 100 W. | 108° 40′ 00″ | 108° 37′ 30″

40° 45′ 00″ | 40° 42′ 30″ | T. 9 N. T. 8 N. | 40° 40′ 00″ | 40° 37′ 30″

Joins sheet 41, Jack Springs

Joins sheet 43, Sheephead Basin

Joins sheet 56, Zenobia Peak

Joins sheet 57, Greystone

Joins sheet 58, Limestone Hill

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1 MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 0 1 KILOMETERS

QUADRANGLE LOCATION

VERMILLION MESA, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 42 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
SHEEPHEAD BASIN QUADRANGLE
SHEET NUMBER 43 OF 110

Joins sheet 27, Irish Canyon
Joins sheet 28, G Spring
Joins sheet 29, Sheepherder Springs
Joins sheet 42, Vermillion Mesa
Joins sheet 44, Clay Buttes
Joins sheet 51, Greystone
Joins sheet 58, Limestone Hill
Joins sheet 59, Lone Mountain

108° 37′ 30″ | 108° 35′ 00″ | R. 100 W. | R. 99 W. | 108° 32′ 30″ | 108° 30′ 00″

40° 45′ 00″ | 40° 42′ 30″ | T. 9 N. / T. 8 N. | 40° 40′ 00″ | 40° 37′ 30″

The Bears Ears
Draw
Kraft
Left-hand
Spicer Basin
Draw
Marshall
Hartman
Draw
Draw
West
Boone
Draw
Langley
Draw
Sager
Draw
DRY
MOUNTAIN
Sand
Wash
South
Sheephead
Basin
East
Boone
Draw
318

SCALE 1:24000

1 0 1
MILES
1000 0 1000 2000 3000 4000 5000 6000 7000
FEET
1 0 1
KILOMETERS

NORTH

QUADRANGLE LOCATION

SHEEPHEAD BASIN, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 43 OF 110

This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of the Interior, Geological Survey, from 1993-1995 aerial photography. Hydrography, culture, and public land survey system (PLSS) information were acquired from U.S. Geological Survey.

North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
CLAY BUTTES QUADRANGLE
SHEET NUMBER 44 OF 110

Joins sheet 28, G Spring
Joins sheet 29, Sheepherder Springs
Joins sheet 30, Lang Spring
Joins sheet 43, Sheephead Basin
Joins sheet 45, Sevenmile Draw
Joins sheet 58, Limestone Hill
Joins sheet 59, Lone Mountain
Joins sheet 60, Peck Mesa

108° 30′ 00″ | 108° 27′ 30″ | 108° 25′ 00″ | 108° 22′ 30″
R. 99 W. | R. 98 W.
40° 45′ 00″ | 40° 42′ 30″ | 40° 40′ 00″ | 40° 37′ 30″
T. 9 N. | T. 8 N.

BUTTES
CLAY
Clay Buttes Reservoir
Sand Wash
South Sand Wash
Two Bar Draw
Pigpen Draw
Pigpen Hill
Vaughn Draw
Sheepherder Springs Draw
Sheepherder Wash
Cat Wash
Sand Wash
East Boone Draw
Monument Hill

This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of the Interior, Geological Survey, from 1993-1995 aerial photography. Hydrography, culture, and public land survey system (PLSS) information were acquired from U.S. Geological Survey.

North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1 MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 0 1 KILOMETERS

QUADRANGLE LOCATION

CLAY BUTTES, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 44 OF 110

Joins sheet 29, Sheephorder Springs

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
SEVENMILE DRAW QUADRANGLE
SHEET NUMBER 45 OF 110

Joins sheet 31, The Nipple

Joins sheet 30, Lang Spring

108°22′30″ R. 98 W. R. 97 W. 108°20′00″ 108°17′30″ 108°15′00″

40°45′00″ 40°42′30″ T. 9 N. T. 8 N. 40°40′00″ 40°37′30″

Joins sheet 44, Clay Buttes

Joins sheet 46, Ninemile Hill

Joins sheet 59, Lone Mountain

Joins sheet 60, Peck Mesa

Joins sheet 61, Sunbeam

Yellow Cat Butte

Yellow Cat West

Draw

Dugout

Sevenmile Draw

RIDGE

SEVENMILE

LITTLE SNAKE

Wash

Sand Wash

This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of the Interior, Geological Survey, from 1993-1995 aerial photography. Hydrography, culture, and public land survey system (PLSS) information were acquired from U.S. Geological Survey.

North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1 MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 0 1 KILOMETERS

QUADRANGLE LOCATION

SEVENMILE DRAW, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 45 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
NINEMILE HILL QUADRANGLE
SHEET NUMBER 46 OF 110

Joins sheet 31, The Nipple

108°15′00″ R. 97 W. R. 96 W. 108°12′30″ 108°10′00″ 108°07′30″

40°45′00″ 40°42′30″ T. 9 N. T. 8 N. 40°40′00″ 40°37′30″

Joins sheet 45, Sevenmile Draw

Joins sheet 47, Bald Mountain

Joins sheet 60, Peck Mesa

Joins sheet 61, Sunbeam

Joins sheet 62, Hayden

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1 MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 0 1 KILOMETERS

QUADRANGLE LOCATION

NINEMILE HILL, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 46 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
BALD MOUNTAIN QUADRANGLE
SHEET NUMBER 47 OF 110

Joins sheet 31, The Nipple

Joins sheet 32, The Nipple SE

Joins sheet 33, Maybery Spring

108°07′30″ — 108°05′00″ — 108°02′30″ — 108°00′00″

R. 96 W. — R. 95 W. — R. 94 W.

40°45′00″

40°42′30″

T. 9 N.
T. 8 N.

40°40′00″

40°37′30″

Joins sheet 46, Ninemile Hill

Joins sheet 48, Adobe Springs

Joins sheet 61, Sunbeam

Joins sheet 62, Maybell

Joins sheet 63, Lay

Red Wash

Draw

Shafter Draw

Bald Mountain

Bald Mountain Draw

Sand Creek

Alkali Draw

Alkali Draw

Hardgrove Run

Creek

Spring

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

BALD MOUNTAIN, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 47 OF 110

Joins sheet 32, The Nipple SE

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

Joins sheet 33, Mayberry Spring

MOFFAT COUNTY AREA, COLORADO
ADOBE SPRINGS QUADRANGLE
SHEET NUMBER 48 OF 110

Joins sheet 34, Great Divide

108° 00′ 00″ | 107° 57′ 30″ | 107° 55′ 00″ | R. 94 W. R. 93 W. | 107° 52′ 30″

40° 45′ 00″

40° 42′ 30″

T. 9 N.
T. 8 N.

40° 40′ 00″

40° 37′ 30″

Joins sheet 47, Bald Mountain

Joins sheet 49, Iron Springs

R. 95 W. R. 94 W. | 108° 00′ 00″ | 107° 57′ 30″ | 107° 55′ 00″ | R. 94 W. R. 93 W. | 107° 52′ 30″

Joins sheet 63, Lay

Joins sheet 62, Maybell

Joins sheet 64, Lay SE

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

ADOBE SPRINGS, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 48 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
IRON SPRINGS QUADRANGLE
SHEET NUMBER 49 OF 110

Joins sheet 33, Mayberry Spring
Joins sheet 34, Great Divide
Joins sheet 35, East Timberlake Creek
Joins sheet 48, Adobe Springs
Joins sheet 50, Craig NW
Joins sheet 63, Lay
Joins sheet 64, Lay SE
Joins sheet 65, Pine Ridge

107°52′30″ 107°50′00″ 107°47′30″ R. 93 W. R. 92 W. 107°45′00″

40°45′00″ 40°42′30″ T. 9 N. T. 8 N. 40°40′00″ 40°37′30″

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1 MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 0 1 KILOMETERS

QUADRANGLE LOCATION

IRON SPRINGS, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 49 OF 110

Joins sheet 34, Great Divide

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
CRAIG NW QUADRANGLE
SHEET NUMBER 50 OF 110

Joins sheet 36, Fortification

Joins sheet 35, East Timberlake Creek

107° 45′ 00″ | 107° 42′ 30″ | 107° 40′ 00″ | R. 92 W. | R. 91 W. | 107° 37′ 30″

40° 45′ 00″

40° 42′ 30″

T. 9 N.
T. 8 N.

40° 40′ 00″

40° 37′ 30″

Housel Gulch
Dressler Gulch
Gulch
Big Gulch
Fork
North Fork
Big Creek
Gravel Creek
Blue

Joins sheet 49, Iron Springs

Joins sheet 51, Craig NE

Joins sheet 64, Lay SE

Joins sheet 65, Pine Ridge

Joins sheet 66, Craig

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

CRAIG NW, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 50 OF 110

Joins sheet 35, East Timberlake Creek

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
CRAIG NE QUADRANGLE
SHEET NUMBER 51 OF 110

Joins sheet 37, Freeman Reservoir

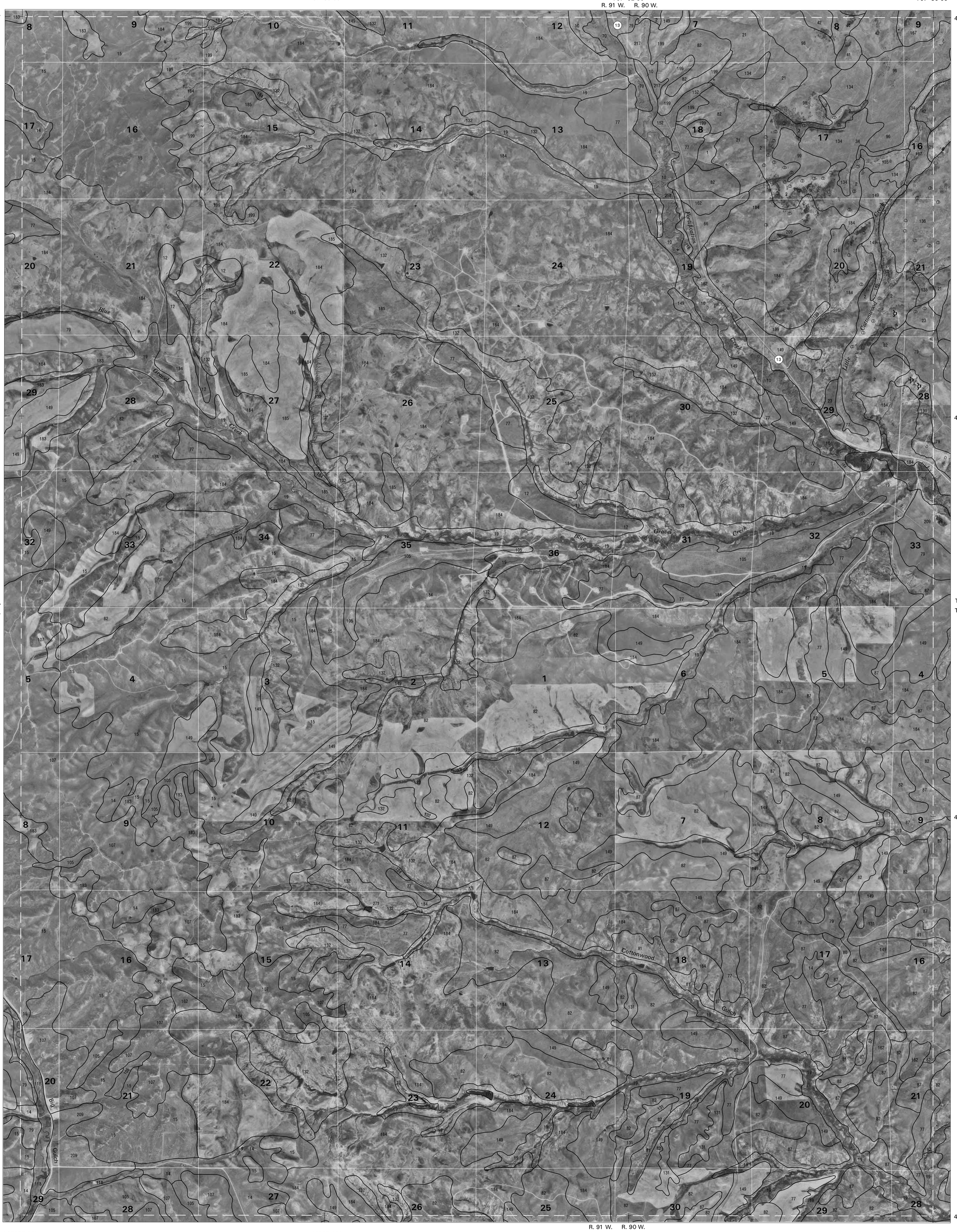
Joins sheet 36, Fortification

107°37′30″ 107°35′00″ 107°32′30″ 107°30′00″

R. 91 W. R. 90 W.

40°45′00″ 40°42′30″ 40°40′00″ 40°37′30″

T. 9 N.
T. 8 N.



Joins sheet 50, Craig NW

Joins sheet 52, McInturf Mesa

Joins sheet 65, Pine Ridge

Joins sheet 66, Craig

Joins sheet 67, Ralph White Lake

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

MILES

FEET

KILOMETERS

QUADRANGLE LOCATION

CRAIG NE, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 51 OF 110

107° 30′ 00″ | 107° 27′ 30″ | R. 90 W. | R. 89 W. | 107° 25′ 00″ | 107° 22′ 30″

40° 45′ 00″ | 40° 42′ 30″ | T. 9 N. | T. 8 N. | 40° 40′ 00″ | 40° 37′ 30″

Joins sheet 51, Craig NE

Joins sheet 53, Slide Mountain

Joins sheet 66, Craig

Joins sheet 67, Ralph White Lake

Joins sheet 68, Rock Spring Gulch

Little Cottonwood Creek
Little Buck Mountain
Routt National Forest
Taylor Creek
Falls Creek
Little Bear Creek
Mesa
Mc Inturf
Pinnacle Mountain
Fortification Creek
Cedar Hill Gulch
Cedar Hill
Bear Creek
Dry Rock Gulch
Cottonwood Gulch
Ralph White Lake
Cole Gulch

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

MCINTURF MESA, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 52 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
SLIDE MOUNTAIN QUADRANGLE
SHEET NUMBER 53 OF 110

Joins sheet 37, Freeman Reservoir

Joins sheet 38, Buck Point

107°22′30″ 107°20′00″ R. 89 W. R. 88 W. 107°17′30″ 107°15′00″

40°45′00″ 40°42′30″ 40°40′00″ 40°37′30″

T. 9 N.
T. 8 N.

Joins sheet 52, McInturf Mesa

Joins sheet 67, Ralph White Lake

Joins sheet 68, Rock Spring Gulch

Little Bear Creek
Dry Fork
ROUTT NATIONAL FOREST
Bear Creek
Little Dry Fork
Buck Mountain
Long Gulch
MOFFAT COUNTY
ROUTT COUNTY
Cottonwood Gulch

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

SLIDE MOUNTAIN, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 53 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
JONES HOLE QUADRANGLE
SHEET NUMBER 54 OF 110

Joins sheet 40, Canyon of Lodore North

Joins sheet 39, Hoy Mountain

109° 07′ 30″ | 109° 05′ 00″ | 109° 02′ 30″ | 109° 00′ 00″

R. 25 E. | R. 104 W. | R. 104 W. | R. 103 W.

40° 37′ 30″ | 40° 35′ 00″ | 40° 32′ 30″ | 40° 30′ 00″

T. 2 S.
T. 3 S.

T. 8 N.
T. 7 N.

T. 3 S.
T. 4 S.

T. 7 N.
T. 6 N.

UTAH
COLORADO
UINTAH COUNTY
MOFFAT COUNTY

23 24 19 20
26 25 30 29
36 31
2 1 6

WILD
MOUNTAIN

LIMIT OF SOIL SURVEY

DINOSAUR
NATIONAL
MONUMENT

Joins sheet 55, Canyon of Lodore South

Joins sheet 69, Stuntz Reservoir

Joins sheet 70, Hells Canyon

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1 MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 0 1 KILOMETERS

QUADRANGLE LOCATION

JONES HOLE, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 54 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
CANYON OF LODORE SOUTH QUADRANGLE
SHEET NUMBER 55 OF 110

Joins sheet 40, Canyon of Lodore North

109°00′00″ 108°57′30″ 108°55′00″ 108°52′30″

R. 103 W. R. 102 W.

40°37′30″ 40°35′00″ 40°32′30″ 40°30′00″

T. 8 N.
T. 7 N.
T. 7 N.
T. 6 N.

DINOSAUR NATIONAL MONUMENT

SOIL SURVEY OF LIMIT

20 21 29 28 32 6 5 7 8 17

Joins sheet 54, Jones Hole

Joins sheet 56, Zenobia Peak

Joins sheet 69, Stuntz Reservoir

Joins sheet 70, Hells Canyon

Joins sheet 71, Yanks Peak

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1 MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 0 1 KILOMETERS

QUADRANGLE LOCATION

CANYON OF LODORE SOUTH, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 55 OF 110

Joins sheet 40, Canyon of Lodore North

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
ZENOBIA PEAK QUADRANGLE
SHEET NUMBER 56 OF 110

Joins sheet 42, Vermillion Mesa

Joins sheet 41, Jack Springs

108°52′30″ 108°50′00″ 108°47′30″ 108°45′00″

R. 102 W. R. 101 W.

40°37′30″ 40°35′00″ 40°32′30″ 40°30′00″

T. 8 N.
T. 7 N.

DINOSAUR NATIONAL MONUMENT

DOUGLAS MOUNTAIN

SURVEY LIMIT OF SOIL SURVEY

Little Joe Draw
Five Springs Draw
Dry Valley
Peterson Draw
Holland Draw
Big Joe Draw
Ant Hills
Reds Knob
Back Draw
Cottonwood Creek

Joins sheet 55, Canyon of Lodore South

Joins sheet 57, Greystone

Joins sheet 70, Hells Canyon

Joins sheet 71, Tanks Peak

Joins sheet 72, Haystack Rock

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

ZENOBIA PEAK, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 56 OF 110

Joins sheet 41, Jack Springs

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
GREYSTONE QUADRANGLE
SHEET NUMBER 57 OF 110

Joins sheet 43, Sheephead Basin

Joins sheet 42, Vermillion Mesa

108° 45′ 00″ | 108° 42′ 30″ | R. 101 W. R. 100 W. | 108° 40′ 00″ | 108° 37′ 30″

40° 37′ 30″

T. 8 N.
T. 7 N.

40° 35′ 00″

40° 32′ 30″

40° 30′ 00″

Joins sheet 56, Zenobia Peak

Joins sheet 58, Limestone Hill

Greystone
Rye Grass Draw
Weller Draw
Thomas Draw
Kurth Draw
Draw
Douglas Draw
Dutch Oven Canyon
Smelter Hill
John Weller Mesa
Van Noy Valley
Deer Valley
DOUGLAS MOUNTAIN
Buck Draw
Buck Ridge Draw
The Gap
Jacobson Draw
Limestone Ridge
Bower Draw
Browns Draw
Tepee Draw
Iron Mine Basin
DINOSAUR NATIONAL MONUMENT
LIMIT OF SOIL SURVEY

Joins sheet 71, Tanks Peak

Joins sheet 73, Indian Water Canyon

Joins sheet 72, Haystack Rock

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

GREYSTONE, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 57 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
LIMESTONE HILL QUADRANGLE
SHEET NUMBER 58 OF 110

Joins sheet 42, Vermillion Mesa
Joins sheet 43, Sheephead Basin
Joins sheet 44, Clay Buttes
Joins sheet 57, Greystone
Joins sheet 59, Lone Mountain
Joins sheet 72, Haystack Rock
Joins sheet 73, Indian Water Canyon
Joins sheet 74, Twelvemile Mesa

108° 37′ 30″ | 108° 35′ 00″ | R. 100 W. R. 99 W. | 108° 32′ 30″ | 108° 30′ 00″

40° 37′ 30″ | 40° 35′ 00″ | 40° 32′ 30″ | 40° 30′ 00″

T. 8 N.
T. 7 N.
T. 7 N.
T. 6 N.

Sagar Draw
Weller Draw
MESA
WELLER
JOHN
Limestone Hill
Bill Weller Mesa
Chase Hill
Draw
Thompson
Draw
Thompson
DOUGLAS
MOUNTAIN
Allred Peak
Sawmill Canyon
Happy Hollow
Coral Springs Draw

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

MILES
FEET
KILOMETERS

QUADRANGLE LOCATION

LIMESTONE HILL, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 58 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
LONE MOUNTAIN QUADRANGLE
SHEET NUMBER 59 OF 110

Joins sheet 43, Shiesheid Basin

Joins sheet 45, Sevenmile Draw

Joins sheet 44, Clay Buttes

108° 30′ 00″ — 108° 27′ 30″ — 108° 25′ 00″ — 108° 22′ 30″

R. 99 W. R. 98 W.

40° 37′ 30″ — 40° 35′ 00″ — 40° 32′ 30″ — 40° 30′ 00″

T. 8 N.
T. 7 N.
T. 7 N.
T. 6 N.

Joins sheet 58, Limestone Hill

Joins sheet 60, Peck Mesa

Joins sheet 73, Indian Water Canyon

Joins sheet 74, Twelvemile Mesa

Joins sheet 75, Coss Mountain Canyon

East Boone Draw
Lone Mountain
Thompson Canyon
Lone Mountain
Draw
DOUGLAS MOUNTAIN
SNAKE RIVER
LITTLE
COSS MOUNTAIN
Wild Cow Draw

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

LONE MOUNTAIN, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 59 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
PECK MESA QUADRANGLE
SHEET NUMBER 60 OF 110

Joins sheet 44, Clay Buttes
Joins sheet 45, Sevenmile Draw
Joins sheet 46, Minemile Hill
Joins sheet 59, Lone Mountain
Joins sheet 61, Sunbeam
Joins sheet 74, Twelvemile Mesa
Joins sheet 75, Cross Mountain Canyon
Joins sheet 76, Cedar Knob

108°22′30″ 108°20′00″ 108°17′30″ 108°15′00″
R. 98 W. R. 97 W.
40°37′30″ 40°35′00″ 40°32′30″ 40°30′00″
T. 8 N. T. 7 N. T. 7 N. T. 6 N.

East Boone Draw
Stard Wash
SNAKE RIVER
LITTLE
Simsberry Draw
Three C Wash
YAMPA RIVER
Cedar Tree Gulch
Cedar Springs Draw
CROSS MOUNTAIN
PECK MESA

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

PECK MESA, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 60 OF 110

Joins sheet 45, Sevenmile Draw

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
SUNBEAM QUADRANGLE
SHEET NUMBER 61 OF 110

Joins sheet 47, Bald Mountain

Joins sheet 46, Ninemile Hill

108°15′00″ R. 97 W. R. 96 W. 108°12′30″ 108°10′00″ 108°07′30″

40°37′30″ 40°35′00″ 40°32′30″ 40°30′00″

T. 8 N.
T. 7 N.
T. 7 N.
T. 6 N.

Joins sheet 60, Peck Mesa

Joins sheet 62, Maybell

Joins sheet 75, Cross Mountain Canyon

Joins sheet 76, Cedar Knob

Joins sheet 77, Juniper Mountain

RIM
GODIVA
BASIN
MOUNTAIN
BALD
Draw
Simmberry
Creek
Sand
Creek
Willow
Suttles Basin
Indian Rock
PECK MESA
Sunbeam
YAMPA RIVER
Thornburg
Draw
Overholt
Draw
Lone Tree Gulch

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

SUNBEAM, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 61 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
MAYBELL QUADRANGLE
SHEET NUMBER 62 OF 110

Joins sheet 46, Nuremile Hill
Joins sheet 47, Bald Mountain
Joins sheet 48, Adobe Springs
Joins sheet 61, Sunbeam
Joins sheet 63, Lay
Joins sheet 76, Cedar Knob
Joins sheet 77, Juniper Mountain
Joins sheet 78, Juniper Hot Springs

108°07′30″ R. 96 W. R. 95 W. 108°05′00″ 108°02′30″ 108°00′00″

40°37′30″ T. 8 N. T. 7 N. 40°35′00″ 40°32′30″ T. 7 N. T. 6 N. 40°30′00″

Alkali Draw
Sand Creek
Willow Creek
Hat Hill
Spring Creek
Mud Spring Gulch
Eagle Rock
Wildcat Draw
Smith Creek
YAMPA RIVER
Maybell
Deception Creek
Lay Creek

This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of the Interior, Geological Survey, from 1993-1995 aerial photography. Hydrography, culture, and public land survey system (PLSS) information were acquired from U.S. Geological Survey.

North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

MAYBELL, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 62 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
LAY QUADRANGLE
SHEET NUMBER 63 OF 110

Joins sheet 47, Bald Mountain
Joins sheet 48, Adobe Springs
Joins sheet 49, Iron Springs
Joins sheet 62, Maybell
Joins sheet 64, Lay SE
Joins sheet 77, Juniper Mountain
Joins sheet 78, Juniper Hot Springs
Joins sheet 79, Horse Gulch

108°00′00″ 107°57′30″ 107°55′00″ 107°52′30″

R. 94 W. R. 93 W.

40°37′30″ 40°35′00″ 40°32′30″ 40°30′00″

T. 8 N. T. 7 N. T. 6 N.

Spring Gulch
Mud
Sugarloaf Peak
Basin
Sugarloaf
Wet Gulch
Lay Creek
Lay
Lay Peak

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

LAY, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 63 OF 110

Joins sheet 48, Adobe Springs

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
LAY SE QUADRANGLE
SHEET NUMBER 64 OF 110

Joins sheet 50, Craig NW

Joins sheet 49, Iron Springs

107°52′30″ | 107°50′00″ | 107°47′30″ | R. 93 W. R. 92 W. | 107°45′00″

40°37′30″

T. 8 N.
T. 7 N.

40°35′00″

T. 7 N.
T. 6 N.

40°32′30″

40°30′00″

Joins sheet 63, Lay

Joins sheet 65, Pine Ridge

Joins sheet 78, Juniper Hot Springs

Joins sheet 79, Horse Gulch

Joins sheet 80, Round Bottom

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

MILES: 1 0 1

FEET: 1000 0 1000 2000 3000 4000 5000 6000 7000

KILOMETERS: 1 0 1

QUADRANGLE LOCATION

LAY SE, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 64 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
PINE RIDGE QUADRANGLE
SHEET NUMBER 65 OF 110

Joins sheet 49, Iron Springs
Joins sheet 50, Craig NW
Joins sheet 51, Craig NE
Joins sheet 64, Lay SE
Joins sheet 66, Craig
Joins sheet 79, Horse Gulch
Joins sheet 80, Round Bottom
Joins sheet 81, Castor Gulch

107°45′00″ 107°42′30″ 107°40′00″ 107°37′30″
R. 92 W. R. 91 W.
40°37′30″ 40°35′00″ 40°32′30″ 40°30′00″
T. 8 N. T. 7 N. T. 6 N.

Big Gulch
North Fork Big Gulch
Big Gulch
Gulch
Pine Ridge
Pine Ridge Gulch
Sevenmile Hill
Spring Gulch
Sand Gulch
Bogenschutz Creek

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1 MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 0 1 KILOMETERS

QUADRANGLE LOCATION

PINE RIDGE, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 65 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
CRAIG QUADRANGLE
SHEET NUMBER 66 OF 110

Joins sheet 50, Craig NW
Joins sheet 51, Craig NE
Joins sheet 52, McIntyre Mesa
Joins sheet 65, Pine Ridge
Joins sheet 67, Ralph White Lake
Joins sheet 80, Round Bottom
Joins sheet 81, Castor Gulch
Joins sheet 82, Breeze Mountain

107°37′30″ 107°35′00″ 107°32′30″ 107°30′00″
R. 91 W. R. 90 W.
40°37′30″ 40°35′00″ 40°32′30″ 40°30′00″
T. 8 N. T. 7 N. T. 6 N.

Big Gulch · Sand Gulch · Agee Gulch · Cedar Mountain · Pine Ridge · Gulch · Fortification Creek · Craig · RAILROAD · YAMPA RIVER

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES
1000 0 1000 2000 3000 4000 5000 6000 7000
FEET
1 0 1
KILOMETERS

QUADRANGLE LOCATION

CRAIG, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 66 OF 110

Joins sheet 51, Craig NE

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
RALPH WHITE LAKE QUADRANGLE
SHEET NUMBER 67 OF 110

Joins sheet 53, Slide Mountain

Joins sheet 52, McInturf Mesa

107°30′00″ | 107°27′30″ | R. 90 W. | R. 89 W. | 107°25′00″ | 107°22′30″

40°37′30″

T. 8 N.
T. 7 N.

40°35′00″

40°32′30″

T. 7 N.
T. 6 N.

40°30′00″

Joins sheet 66, Craig

Joins sheet 68, Rock Spring Gulch

Joins sheet 81, Castor Gulch

Joins sheet 82, Breeze Mountain

MOFFAT COUNTY
ROUTT COUNTY

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

RALPH WHITE LAKE, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 67 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
ROCK SPRING GULCH QUADRANGLE
SHEET NUMBER 68 OF 110

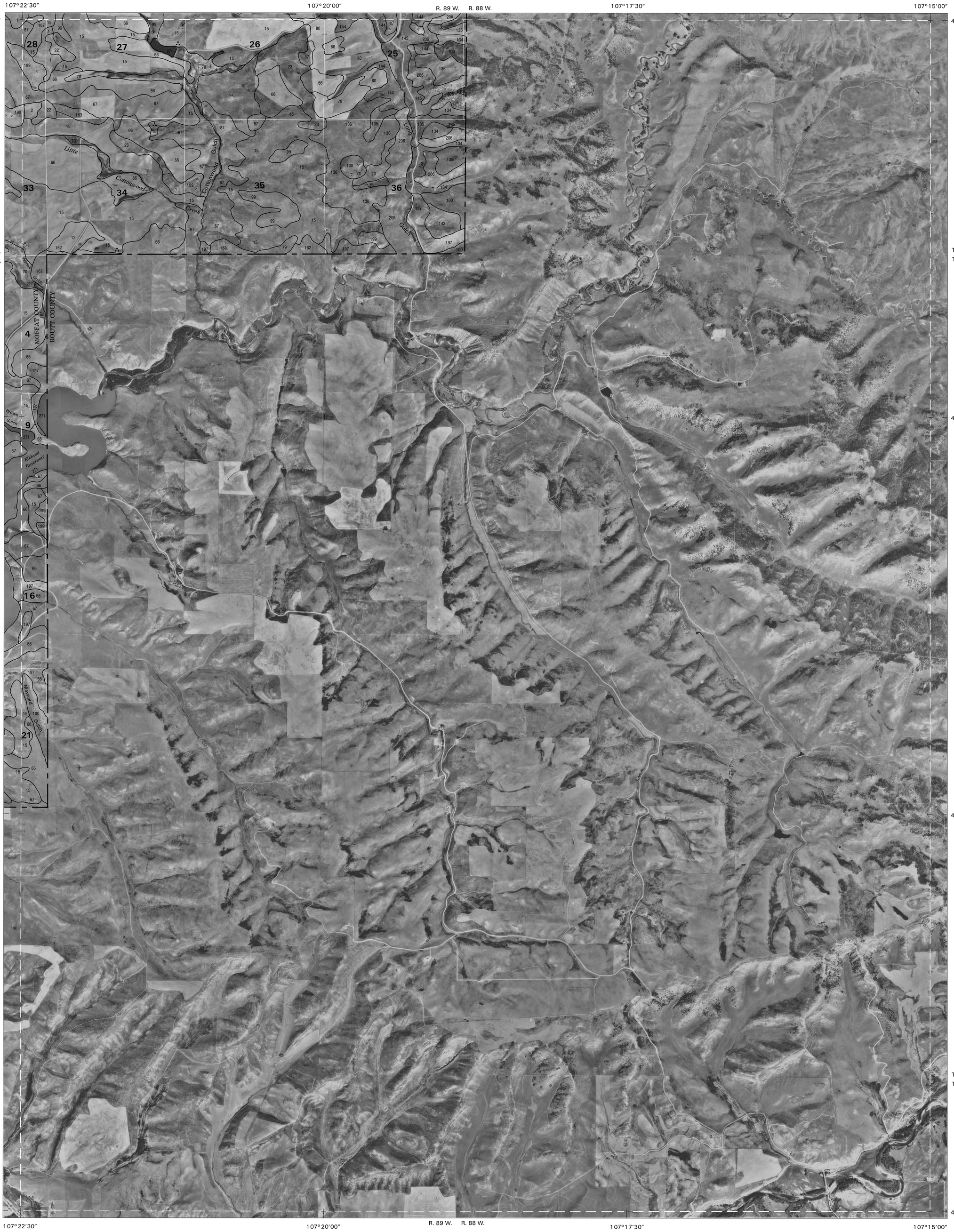
Joins sheet 52, McInturf Mesa

Joins sheet 53, Slide Mountain

107°22′30″ 107°20′00″ R. 89 W. R. 88 W. 107°17′30″ 107°15′00″

40°37′30″ 40°35′00″ 40°32′30″ 40°30′00″

T. 8 N.
T. 7 N.
T. 7 N.
T. 6 N.



Joins sheet 67, Ralph White Lake

Joins sheet 82, Breeze Mountain

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

ROCK SPRING GULCH, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 68 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
STUNTZ RESERVOIR QUADRANGLE
SHEET NUMBER 69 OF 110

Joins sheet 54, Jones Hole
Joins sheet 55, Canyon of Lodore South
Joins sheet 70, Hells Canyon
Joins sheet 84, Plug Hat Rock
Joins sheet 83, Snake John Reef

109°07′30″ 109°05′00″ 109°02′30″ 109°00′00″
40°30′00″ 40°27′30″ 40°25′00″ 40°22′30″
R. 25 E. R. 104 W. R. 104 W. R. 103 W.
T. 4 S. T. 5 S. T. 6 N. T. 5 N.

DINOSAUR NATIONAL MONUMENT

UINTAH COUNTY UTAH
MOFFAT COUNTY COLORADO

Stuntz Reservoir
Cottonwood Creek
Mud Springs Draw
RIDGE
STUNTZ

SOIL SURVEY LIMIT OF

This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of the Interior, Geological Survey, from 1993-1995 aerial photography. Hydrography, culture, and public land survey system (PLSS) information were acquired from U.S. Geological Survey.

North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

MILES 1 0 1

FEET 1000 0 1000 2000 3000 4000 5000 6000 7000

KILOMETERS 1 0 1

QUADRANGLE LOCATION

STUNTZ RESERVOIR, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 69 OF 110

Joins sheet 54, Jones Hole

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

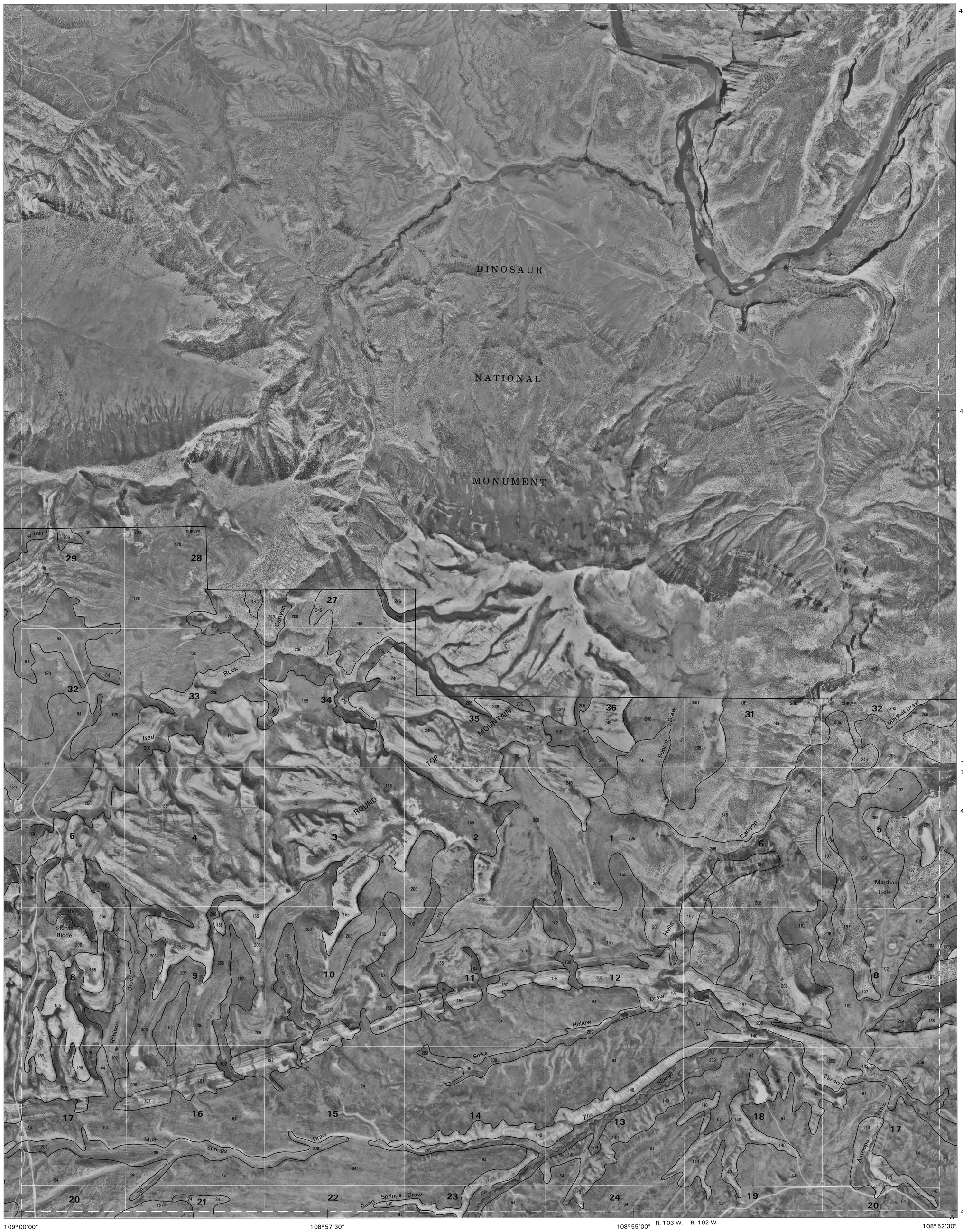
MOFFAT COUNTY AREA, COLORADO
HELLS CANYON QUADRANGLE
SHEET NUMBER 70 OF 110

Joins sheet 56, Zenobia Peak

Joins sheet 55, Canyon of Lodore South

109°00′00″ 108°57′30″ 108°55′00″ 108°52′30″

40°30′00″ 40°27′30″ 40°25′00″ 40°22′30″



Joins sheet 69, Stuntz Reservoir

Joins sheet 71, Tanks Peak

Joins sheet 84, Plug Hat Rock

Joins sheet 83, Snake John Reef

Joins sheet 85, Lazy Y Point

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NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

HELLS CANYON, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 70 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
TANKS PEAK QUADRANGLE
SHEET NUMBER 71 OF 110

Joins sheet 55, Canyon of Lodore South

Joins sheet 56, Zenobia Peak

Joins sheet 57, Greystone

108°52′30″ 108°50′00″ 108°47′30″ 108°45′00″

40°30′00″ 40°27′30″ 40°25′00″ 40°22′30″

Joins sheet 70, Hells Canyon

Joins sheet 72, Haystack Rock

DINOSAUR NATIONAL MONUMENT

LIMIT OF SOIL SURVEY

Tanks Peak

Marthas Hole

Deer Reservoir

Draw

Johnson Draw

Sarviceberry Draw

Mud Springs Draw

Milhearn Draw

Turner Creek

Wolf Creek

T. 6 N.
T. 5 N.

R. 102 W. R. 101 W.

Joins sheet 84, Plug Hat Rock

Joins sheet 85, Lazy Y Point

Joins sheet 86, Skull Creek

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

TANKS PEAK, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 71 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
HAYSTACK ROCK QUADRANGLE
SHEET NUMBER 72 OF 110

Joins sheet 56, Zenobia Peak
Joins sheet 57, Greystone
Joins sheet 58, Limestone Hill
Joins sheet 71, Tanks Peak
Joins sheet 73, Indian Water Canyon
Joins sheet 85, Lazy Y Point
Joins sheet 86, Skull Creek
Joins sheet 87, Mt Fitzpatrick

108° 45′ 00″ | 108° 42′ 30″ | R. 101 W. R. 100 W. | 108° 40′ 00″ | 108° 37′ 30″

40° 30′ 00″ | 40° 27′ 30″ | 40° 25′ 00″ | 40° 22′ 30″

T. 6 N.
T. 5 N.

DINOSAUR NATIONAL MONUMENT

BEAR VALLEY RIDGE

Bear Valley
Bear Valley Draw
East Bear Valley Draw
Wasson Draw
Wall Creek
Tepee Draw

LIMIT OF SOIL SURVEY

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

MILES: 1 0 1

FEET: 1000 0 1000 2000 3000 4000 5000 6000 7000

KILOMETERS: 1 0 1

QUADRANGLE LOCATION

HAYSTACK ROCK, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 72 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
INDIAN WATER CANYON QUADRANGLE
SHEET NUMBER 73 OF 110

Joins sheet 57, Greystone

Joins sheet 58, Limestone Hill

Joins sheet 59, Lone Mountain

108° 37′ 30″ | 108° 35′ 00″ | R. 100 W. R. 99 W. | 108° 32′ 30″ | 108° 30′ 00″

40° 30′ 00″

40° 27′ 30″

40° 25′ 00″

40° 22′ 30″

T. 6 N.
T. 5 N.

Joins sheet 72, Haystack Rock

Joins sheet 74, Twelvemile Mesa

DINOSAUR NATIONAL MONUMENT

Sawmill Canyon
Klauson Pasture
Texas Draw
Yampa River
Corral Springs Draw
Water Canyon
Indian Badger Flat
Disappointment Draw
Calico Draw
Bay Gulch

LIMIT OF SOIL SURVEY

Joins sheet 86, Skull Creek

Joins sheet 88, Elk Springs

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

INDIAN WATER CANYON, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 73 OF 110

108° 30′ 00″ | 108° 27′ 30″ | 108° 25′ 00″ | 108° 22′ 30″

R. 99 W. R. 98 W.

Joins sheet 59, Lone Mountain

40° 30′ 00″ | 40° 27′ 30″ | 40° 25′ 00″ | 40° 22′ 30″

Joins sheet 73, Indian Water Canyon

Joins sheet 75, Cross Mountain Canyon

T. 6 N.
T. 5 N.

Joins sheet 87, M F Mountain

Joins sheet 88, Elk Springs

Joins sheet 89, Wagon Peak

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North American Datum of 1983 (NAD83). GRS-80 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 12.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

TWELVEMILE MESA, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 74 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
CROSS MOUNTAIN CANYON QUADRANGLE
SHEET NUMBER 75 OF 110

Joins sheet 59, Lone Mountain
Joins sheet 60, Peck Mesa
Joins sheet 61, Sunbeam
Joins sheet 74, Twelvemile Mesa
Joins sheet 76, Cedar Knob
Joins sheet 88, Elk Springs
Joins sheet 89, Wapiti Peak
Joins sheet 90, Citadel Plateau

108°22′30″ R. 98 W. R. 97 W. 108°20′00″ 108°17′30″ 108°15′00″

40°30′00″ 40°27′30″ T. 6 N. T. 5 N. 40°25′00″ 40°22′30″

CROSS MOUNTAIN
YAMPA Canyon
Cross Mountain
RIVER
Cedar Springs Draw
Twelvemile Gulch
Mud Springs Gulch
Cross Mountain
Elk Springs Ridge

SCALE 1:24000

MILES 1 0 1

FEET 1000 0 1000 2000 3000 4000 5000 6000 7000

KILOMETERS 1 0 1

NORTH

QUADRANGLE LOCATION

CROSS MOUNTAIN CANYON, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 75 OF 110

This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of the Interior, Geological Survey, from 1993-1995 aerial photography. Hydrography, culture, and public land survey system (PLSS) information were acquired from U.S. Geological Survey.

North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
CEDAR KNOB QUADRANGLE
SHEET NUMBER 76 OF 110

Joins sheet 60, Peck Mesa
Joins sheet 61, Sunbeam
Joins sheet 62, Maybell
Joins sheet 75, Cross Mountain Canyon
Joins sheet 77, Juniper Mountain
Joins sheet 89, Wapiti Peak
Joins sheet 90, Citadel Plateau
Joins sheet 91, Price Creek

108°15′00″ R. 97 W. R. 96 W. 108°12′30″ 108°10′00″ 108°07′30″

40°30′00″ 40°27′30″ 40°25′00″ 40°22′30″

T. 6 N.
T. 5 N.

Thornburg Draw
Overholt Draw
Lone Tree Gulch
Ridge
Horse Wild
Dry Lake Reservoir
Cedar Springs Draw
Cedar Knob
Jacobs Ridge
Elk Springs Draw
Freeman Gulch
Hughes Creek
Pine Tree Gulch
Deception Creek

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

CEDAR KNOB, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 76 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
JUNIPER MOUNTAIN QUADRANGLE
SHEET NUMBER 77 OF 110

Joins sheet 61, Sunbeam

Joins sheet 62, Maybell

Joins sheet 63, Lay

108°07′30″ R. 96 W. R. 95 W. 108°05′00″ 108°02′30″ 108°00′00″

40°30′00″ 40°27′30″ 40°25′00″ 40°22′30″

T. 6 N.
T. 5 N.

Joins sheet 76, Cedar Knob

Joins sheet 78, Juniper Hot Springs

Joins sheet 90, Citadel Plateau

Joins sheet 91, Price Creek

Joins sheet 92, Easton Gulch

Lay Creek
YAMPA
RIVER
Juniper Canyon
Deception Creek
Dry Lake Reservoir
Juniper Mountain
Temple Gulch
Hale Gulch

This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of the Interior, Geological Survey, from 1993-1995 aerial photography. Hydrography, culture, and public land survey system (PLSS) information were acquired from U.S. Geological Survey.

North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1 MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 0 1 KILOMETERS

QUADRANGLE LOCATION

JUNIPER MOUNTAIN, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 77 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
JUNIPER HOT SPRINGS QUADRANGLE
SHEET NUMBER 78 OF 110

Joins sheet 62, Maybell
Joins sheet 63, Lay
Joins sheet 64, Lay SE
Joins sheet 77, Juniper Mountain
Joins sheet 79, Horse Gulch
Joins sheet 91, Price Creek
Joins sheet 92, Easton Gulch
Joins sheet 93, Axial

108°00′00″ 107°57′30″ 107°55′00″ 107°52′30″
R. 94 W. R. 93 W.
40°30′00″ 40°27′30″ 40°25′00″ 40°22′30″
T. 6 N. T. 5 N.

Little Juniper Mountain
YAMPA RIVER
Juniper Canyon
Juniper Hot Springs
Gulch
Temple Gulch
Flats
Hale Draw
Jesse Gulch
Maudlin Gulch
Bixelda Gulch
AXIAL BASIN

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

JUNIPER HOT SPRINGS, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 78 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
HORSE GULCH QUADRANGLE
SHEET NUMBER 79 OF 110

Joins sheet 63, Lay

Joins sheet 64, Lay SE

Joins sheet 65, Pine Ridge

107°52′30″ 107°50′00″ 107°47′30″ R. 93 W. R. 92 W. 107°45′00″

40°30′00″ 40°27′30″ 40°25′00″ 40°22′30″

T. 6 N.
T. 5 N.

Joins sheet 78, Juniper Hot Springs

Joins sheet 80, Round Bottom

Joins sheet 92, Easton Gulch

Joins sheet 93, Axial

Joins sheet 94, Monument Butte

Horse Gulch
Signal Butte
YAMPA RIVER
DUFFY MOUNTAIN
Morgan Gulch
Boxelder Gulch
AXIAL BASIN
Spring Gulch
Sand Gulch
Fuhr Gulch
Mill Creek

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

HORSE GULCH, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 79 OF 110

Joins sheet 64, Lay SE

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
ROUND BOTTOM QUADRANGLE
SHEET NUMBER 80 OF 110

Joins sheet 66, Craig

Joins sheet 65, Pine Ridge

107°45′00″ 107°42′30″ 107°40′00″ 107°37′30″

R. 92 W. R. 91 W.

40°30′00″ 40°27′30″ 40°25′00″ 40°22′30″

T. 6 N.
T. 5 N.

Joins sheet 79, Horse Gulch

Joins sheet 81, Castor Gulch

Joins sheet 93, Axial

Joins sheet 94, Monument Butte

Joins sheet 95, Hamilton

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

ROUND BOTTOM, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 80 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
CASTOR GULCH QUADRANGLE
SHEET NUMBER 81 OF 110

Joins sheet 66, Craig

107°37′30″ 107°35′00″ 107°32′30″ 107°30′00″

R. 91 W. R. 90 W.

40°30′00″ 40°27′30″ T. 6 N. T. 5 N. 40°25′00″ 40°22′30″

Joins sheet 80, Round Bottom

Joins sheet 82, Breeze Mountain

Joins sheet 94, Monument Butte

Joins sheet 95, Hamilton

Joins sheet 96, Pagoda

Craig South Highlands
Thompson Hill
Johnson Gulch
Big Gulch
Pyeatt Gulch
Ute Gulch
Castor Gulch
West Stock Pass Gulch
Horse Gulch
Deacon Gulch
Fillmore Gulch
Bonanza Creek
Big Williams Fork
Little Williams Fork
YAMPA RIVER
WILLIAMS FORK MOUNTAINS

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1 MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 0 1 KILOMETERS

QUADRANGLE LOCATION

CASTOR GULCH, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 81 OF 110

107°30′00″ 107°27′30″ R. 90 W. R. 89 W. 107°25′00″ 107°22′30″

40°30′00″ 40°27′30″ 40°25′00″ 40°22′30″

T. 6 N.
T. 5 N.

Joins sheet 81, Castor Gulch

Joins sheet 96, Pagoda

Joins sheet 95, Hamilton

Biskup Reservoir
Breeze Mountain
Dresher Reservoir
BREEZE BASIN
MOFFAT COUNTY
ROUTT COUNTY
Gulch
Buck Peak
WILLIAMS FORK MOUNTAINS
Jeffway Gulch
Spring Gulch
Searcy Gulch
Peck Gulch
Deakin Gulch
394

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1 MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 0 1 KILOMETERS

QUADRANGLE LOCATION

BREEZE MOUNTAIN, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 82 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
SNAKE JOHN REEF QUADRANGLE
SHEET NUMBER 83 OF 110

Joins sheet 69, Stuntz Reservoir
Joins sheet 70, Hells Canyon
Joins sheet 84, Plug Hat Rock
Joins sheet 97, Dinosaur
Joins sheet 98, Nielson Hill

109°07′30″ 109°05′00″ R. 25 E. R. 104 W. 109°02′30″ R. 104 W. R. 103 W. 109°00′00″

40°22′30″ 40°20′00″ 40°17′30″ 40°15′00″

T. 5 S.
T. 6 S.
T. 6 S.
T. 7 S.

T. 5 N.
T. 4 N.
T. 4 N.
T. 3 N.

UINTAH COUNTY, UTAH
MOFFAT COUNTY, COLORADO

Creek
Trail
Creek
Creek
Draw
Draw
Middle
Richardson
Draw
Buckwater
Canyon
Bull
Sand
Spring
Wash
SNAKE JOHN REEF
Sand
Draw

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

SNAKE JOHN REEF, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 83 OF 110

Joins sheet 69, Sturtz Reservoir

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
PLUG HAT ROCK QUADRANGLE
SHEET NUMBER 84 OF 110

Joins sheet 71, Tanks Peak

Joins sheet 70, Hells Canyon

109°00′00″ 108°57′30″ 108°55′00″ R. 103 W. R. 102 W. 108°52′30″

40°22′30″ T. 5 N. T. 4 N. 40°20′00″ 40°17′30″ T. 4 N. T. 3 N. 40°15′00″

Joins sheet 83, Snake John Reef

Joins sheet 85, Lazy Y Point

Joins sheet 97, Dinosaur

Joins sheet 98, Mellen Hill

Joins sheet 99, Rangely NE

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1 MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 0 1 KILOMETERS

QUADRANGLE LOCATION

PLUG HAT ROCK, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 84 OF 110

Joins sheet 70, Hells Canyon

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
LAZY Y POINT QUADRANGLE
SHEET NUMBER 85 OF 110

Joins sheet 72, Haystack Rock

108°52′30″ | 108°50′00″ | Joins sheet 71, Tanks Peak | 108°47′30″ | 108°45′00″

R. 102 W. R. 101 W.

40°22′30″

T. 5 N.

40°20′00″

T. 4 N.

T. 4 N.

T. 3 N.

40°17′30″

40°15′00″

Joins sheet 84, Plug Hat Rock

Joins sheet 86, Skull Creek

Joins sheet 98, Mellen Hill

Joins sheet 99, Rangely NE

Joins sheet 100, Cactus Reservoir

Wolf Creek
Luxen Draw
Turner Creek
Arapahoe Rock
Moose Head Mountain
Red Wash
Lazy Point
Long Draw
Willow Creek
Water Creek
Skyline Reservoir No 3
Skyline Reservoir No 2
Box Canyon
Martin Gap
Little Rock Wall Draw

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1 MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 0 1 KILOMETERS

QUADRANGLE LOCATION

LAZY Y POINT, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 85 OF 110

Joins sheet 71, Tanks Peak

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

Joins sheet 72, Haystack Rock

MOFFAT COUNTY AREA, COLORADO
SKULL CREEK QUADRANGLE
SHEET NUMBER 86 OF 110

Joins sheet 73, Indian Water Canyon

108° 45′ 00″ | 108° 42′ 30″ | R. 101 W. R. 100 W. | 108° 40′ 00″ | 108° 37′ 30″

40° 22′ 30″ | T. 5 N. | 40° 20′ 00″ | T. 4 N. | 40° 17′ 30″ | T. 4 N. | T. 3 N. | 40° 15′ 00″

Joins sheet 85, Lazy Y Point

Joins sheet 87, M F Mountain

Joins sheet 99, Rangely NE

Joins sheet 100, Cactus Reservoir

Joins sheet 101, Divide Creek

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

SCALE 1:24000

1 0 1 MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 0 1 KILOMETERS

NORTH

QUADRANGLE LOCATION

SKULL CREEK, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 86 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
M F MOUNTAIN QUADRANGLE
SHEET NUMBER 87 OF 110

Joins sheet 72, Haystack Rock

Joins sheet 74, Twelvemile Mesa

Joins sheet 73, Indian Water Canyon

108°37′30″ | 108°35′00″ | R. 100 W. R. 99 W. | 108°32′30″ | 108°30′00″

40°22′30″

40°20′00″

40°17′30″

40°15′00″

T. 5 N.
T. 4 N.
T. 3 N.

Wolf Creek Canyon
Wolf Creek
Peters Post
The Sloughs
Yellow Cat Draw
Three Springs
Three Springs Draw
Horse Draw
Peterson Draw
Peterson Draw Reservoir
Peterson Draw Reservoir No 2
Disappointment Draw
Calico Draw
M F Mountain
Maverick Flats
Mancos Reservoir No 2
Wolf Creek Reservoir
Baking Powder Ridge
Sheep Trail Reservoir
Baking Powder Reservoir
Wolf Creek Reservoir No 2

Joins sheet 86, Skull Creek

Joins sheet 88, Elk Springs

Joins sheet 100, Cactus Reservoir

Joins sheet 101, Divide Creek

Joins sheet 102, Rough Gulch

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

M F MOUNTAIN, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 87 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
ELK SPRINGS QUADRANGLE
SHEET NUMBER 88 OF 110

Joins sheet 73, Indian Water Canyon

Joins sheet 74, Twelvemile Mesa

Joins sheet 75, Cross Mountain Canyon

108°30′00″ | 108°27′30″ | R. 99 W. | R. 98 W. | 108°25′00″ | 108°22′30″

40°22′30″

40°20′00″

40°17′30″

40°15′00″

T. 5 N.
T. 4 N.
T. 3 N.

Elk Springs
SPRINGS
RIDGE
ELK
Draw
Springs
Gulch
Buffalo
Winter Valley
PINON
Creek
Coal
Mc Andrews
Gulch

Joins sheet 87, M F Mountain

Joins sheet 89, Wapiti Peak

Joins sheet 101, Divide Creek

Joins sheet 102, Rough Gulch

Joins sheet 103, Smiley Gulch

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

ELK SPRINGS, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 88 OF 110

Joins sheet 74, Twelvemile Mesa

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

Joins sheet 75, Cross Mountain Canyon

MOFFAT COUNTY AREA, COLORADO
WAPITI PEAK QUADRANGLE
SHEET NUMBER 89 OF 110

Joins sheet 76, Cedar Knob

108°22′30″ R. 98 W. R. 97 W. 108°20′00″ 108°17′30″ 108°15′00″

40°22′30″

T. 5 N.
40°20′00″
T. 4 N.

40°17′30″

T. 4 N.
T. 3 N.

40°15′00″

Joins sheet 88, Elk Springs

Joins sheet 90, Citadel Plateau

Joins sheet 102, Rough Gulch

Joins sheet 103, Smizer Gulch

Joins sheet 104, Indian Valley

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

MILES

FEET

KILOMETERS

QUADRANGLE LOCATION

WAPITI PEAK, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 89 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
CITADEL PLATEAU QUADRANGLE
SHEET NUMBER 90 OF 110

Joins sheet 75, Cross Mountain Canyon
Joins sheet 76, Cedar Knob
Joins sheet 77, Juniper Mountain
Joins sheet 89, Wapiti Peak
Joins sheet 91, Price Creek
Joins sheet 103, Snizer Gulch
Joins sheet 104, Indian Valley
Joins sheet 105, White Rock

108°15′00″ R. 97 W. R. 96 W. 108°12′30″ 108°10′00″ 108°07′30″

40°22′30″ T. 5 N. 40°20′00″ T. 4 N. 40°17′30″ T. 3 N. 40°15′00″

ELK SPRINGS RIDGE
Wolf Mountain
Pine Tree Gulch
Freeman Gulch
Steamboat Rock
Swan Draw
Hughes Creek
Bob Creek
DANFORTH HILLS
CITADEL PLATEAU
Escarpment Peak
Indian Springs Draw
Pinto Gulch
Willow Gulch
Channel Deep Creek

This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of the Interior, Geological Survey, from 1993-1995 aerial photography. Hydrography, culture, and public land survey system (PLSS) information were acquired from U.S. Geological Survey.

North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1 MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 0 1 KILOMETERS

QUADRANGLE LOCATION

CITADEL PLATEAU, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 90 OF 110

Joins sheet 76, Cedar Knob

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
PRICE CREEK QUADRANGLE
SHEET NUMBER 91 OF 110

Joins sheet 78, Juniper Hot Springs

Joins sheet 77, Juniper Mountain

108°07′30″ R. 96 W. R. 95 W. 108°05′00″ 108°02′30″ R. 95 W. 108°00′00″

40°22′30″

T. 5 N.
40°20′00″
T. 4 N.

40°17′30″

T. 4 N.
T. 3 N.

40°15′00″

Joins sheet 90, Citadel Plateau

Joins sheet 92, Easton Gulch

Joins sheet 104, Indian Valley

Joins sheet 105, White Rock

Joins sheet 106, Devils Hole Gulch

Draw
Gulch
Clinker Knob
Canyon
Temple
Morgan
Coal Mountain
DANFORTH HILLS
Price Creek
Coyote
Basin
Creek
Deep Channel
Straight
Red Rock Canyon
Dry Creek
Tree
Dry Draw
Indian
Deer
Jesse
Maudlin
Bear
Dry

This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of the Interior, Geological Survey, from 1993-1995 aerial photography. Hydrography, culture, and public land survey system (PLSS) information were acquired from U.S. Geological Survey.

North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

PRICE CREEK, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 91 OF 110

Joins sheet 77, Juniper Mountain

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
EASTON GULCH QUADRANGLE
SHEET NUMBER 92 OF 110

Joins sheet 79, Horse Gulch

Joins sheet 78, Juniper Hot Springs

108°00′00″ R. 94 W. | 107°57′30″ | 107°55′00″ | 107°52′30″ R. 94 W. R. 93 W.

40°22′30″

T. 5 N. 40°20′00″ T. 4 N.

40°17′30″

T. 4 N. T. 3 N.

40°15′00″

108°00′00″ R. 95 W. R. 94 W. | 107°57′30″ | 107°55′00″ | 107°52′30″ R. 94 W. R. 93 W.

Joins sheet 91, Price Creek

Joins sheet 93, Axial

Joins sheet 105, White Rock

Joins sheet 106, Devils Hole Gulch

Joins sheet 107, Ninemile Gap

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1 MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 0 1 KILOMETERS

QUADRANGLE LOCATION

EASTON GULCH, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 92 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
AXIAL QUADRANGLE
SHEET NUMBER 93 OF 110

Joins sheet 78, Juniper Hot Springs
Joins sheet 79, Horse Gulch
Joins sheet 80, Round Bottom
Joins sheet 92, Easton Gulch
Joins sheet 94, Monument Butte
Joins sheet 106, Devils Hole Gulch
Joins sheet 107, Ninemile Gap
Joins sheet 108, Thornburgh

107°52′30″ 107°50′00″ 107°47′30″ 107°45′00″
R. 93 W. R. 92 W.
40°22′30″ 40°20′00″ 40°17′30″ 40°15′00″
T. 5 N. T. 4 N. T. 3 N.

This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of the Interior, Geological Survey, from 1993-1995 aerial photography. Hydrography, culture, and public land survey system (PLSS) information were acquired from U.S. Geological Survey.

North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

AXIAL, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 93 OF 110

Joins sheet 79, Horse Gulch

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
MONUMENT BUTTE QUADRANGLE
SHEET NUMBER 94 OF 110

Joins sheet 81, Castor Gulch

Joins sheet 80, Round Bottom

107°45′00″ 107°42′30″ 107°40′00″ R. 92 W. R. 91 W. 107°37′30″

40°22′30″ 40°20′00″ 40°17′30″ 40°15′00″

T. 5 N. T. 4 N. T. 3 N.

Ralston Draw
Mountain
Iles
Stinking Gulch
Iles Grove
Sulphur Gulch
Long Gulch
Gulch
Creek
Axial
Loyd
Spring
Seeping
Basin
Monument Butte
Moody Gulch
Morapos Creek
Deer Creek
Milk Creek
Wood Gulch
Thornburgh Mountain
Sunking Gulch

Joins sheet 93, Axial

Joins sheet 95, Hamilton

Joins sheet 107, Ninemile Gap

Joins sheet 108, Thornburgh

Joins sheet 109, Sleepy Cat Peak

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

MONUMENT BUTTE, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 94 OF 110

Joins sheet 80, Round Bottom

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
HAMILTON QUADRANGLE
SHEET NUMBER 95 OF 110

Joins sheet 82, Breeze Mountain

107°37′30″ | 107°35′00″ | 107°32′30″ | 107°30′00″

Joins sheet 81, Castor Gulch

R. 91 W. R. 90 W.

40°22′30″ | 40°20′00″ | 40°17′30″ | 40°15′00″

T. 5 N. | T. 4 N. | T. 3 N.

Joins sheet 94, Monument Butte

Joins sheet 96, Pagoda

Joins sheet 108, Thornburgh

Joins sheet 109, Sleepy Cat Peak

Joins sheet 110, Slide Creek

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

HAMILTON, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 95 OF 110

Joins sheet 81, Castor Gulch

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
PAGODA QUADRANGLE
SHEET NUMBER 96 OF 110

Joins sheet 82, Breeze Mountain

107°30′00″ 107°27′30″ R. 90 W. R. 89 W. 107°25′00″ 107°22′30″

40°22′30″

T. 5 N.
T. 4 N.

40°20′00″

40°17′30″

T. 4 N.
T. 3 N.

40°15′00″

Joins sheet 95, Hamilton

Joins sheet 109, Sleepy Cat Peak

Joins sheet 110, Slide Creek

Jeffway Gulch · Spring Gulch · Searcy Gulch · Peck Gulch · Deakin Gulch · Gulch · Homestead Gulch · Peck Flat · Oklahoma Draw · Herring Draw · Waddle Creek · Sullivan Reservoir · Cedar Creek · Coal Creek · WILLIAMS FORK · MOFFAT COUNTY · ROUTT COUNTY

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

PAGODA, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 96 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
DINOSAUR QUADRANGLE
SHEET NUMBER 97 OF 110

Joins sheet 83, Snake John Reef

Joins sheet 84, Plug Hat Rock

Joins sheet 98, Mellen Hill

109°07′30″ 109°05′00″ R. 25 E. R. 104 W. 109°02′30″ R. 104 W. R. 103 W. 109°00′00″

40°15′00″ 40°12′30″ 40°10′00″ 40°07′30″

T. 7 S.
T. 8 S.

T. 3 N.
T. 2 N.

UTAH COUNTY
UINTAH COUNTY
COLORADO
MOFFAT COUNTY

MOFFAT COUNTY
RIO BLANCO COUNTY

Snake John Reef

Dinosaur

10 11 12 7
15 14 13 18

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

DINOSAUR, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 97 OF 110

Joins sheet 83, Snake John Reef

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
MELLEN HILL QUADRANGLE
SHEET NUMBER 98 OF 110

Joins sheet 85, Lazy Y Point

Joins sheet 84, Plug Hat Rock

109°00′00″ 108°57′30″ 108°55′00″ 108°52′30″

R. 103 W. R. 102 W.

40°15′00″

40°12′30″

40°10′00″

40°07′30″

T. 3 N.
T. 2 N.

MOFFAT COUNTY

RIO BLANCO COUNTY

Dripping Rock Creek
Twin Rock Wash
West Twin Wash
Spencer Draw
Willow Creek

Joins sheet 97, Dinosaur

Joins sheet 99, Rangely NE

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

MELLEN HILL, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 98 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
RANGELY NE QUADRANGLE
SHEET NUMBER 99 OF 110

Joins sheet 84, Plug Hat Rock
Joins sheet 85, Lazy Y Point
Joins sheet 86, Skull Creek
Joins sheet 98, Mellen Hill
Joins sheet 100, Cactus Reservoir

108°52′30″ 108°50′00″ 108°47′30″ R. 102 W. R. 101 W. 108°45′00″

40°15′00″ 40°12′30″ 40°10′00″ 40°07′30″

T. 3 N.
T. 2 N.

Blue Mountain
Skyline Reservoir
Red Wash
Wilson Creek
Water Creek
Red Wash Reservoir No 1

MOFFAT COUNTY
RIO BLANCO COUNTY

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

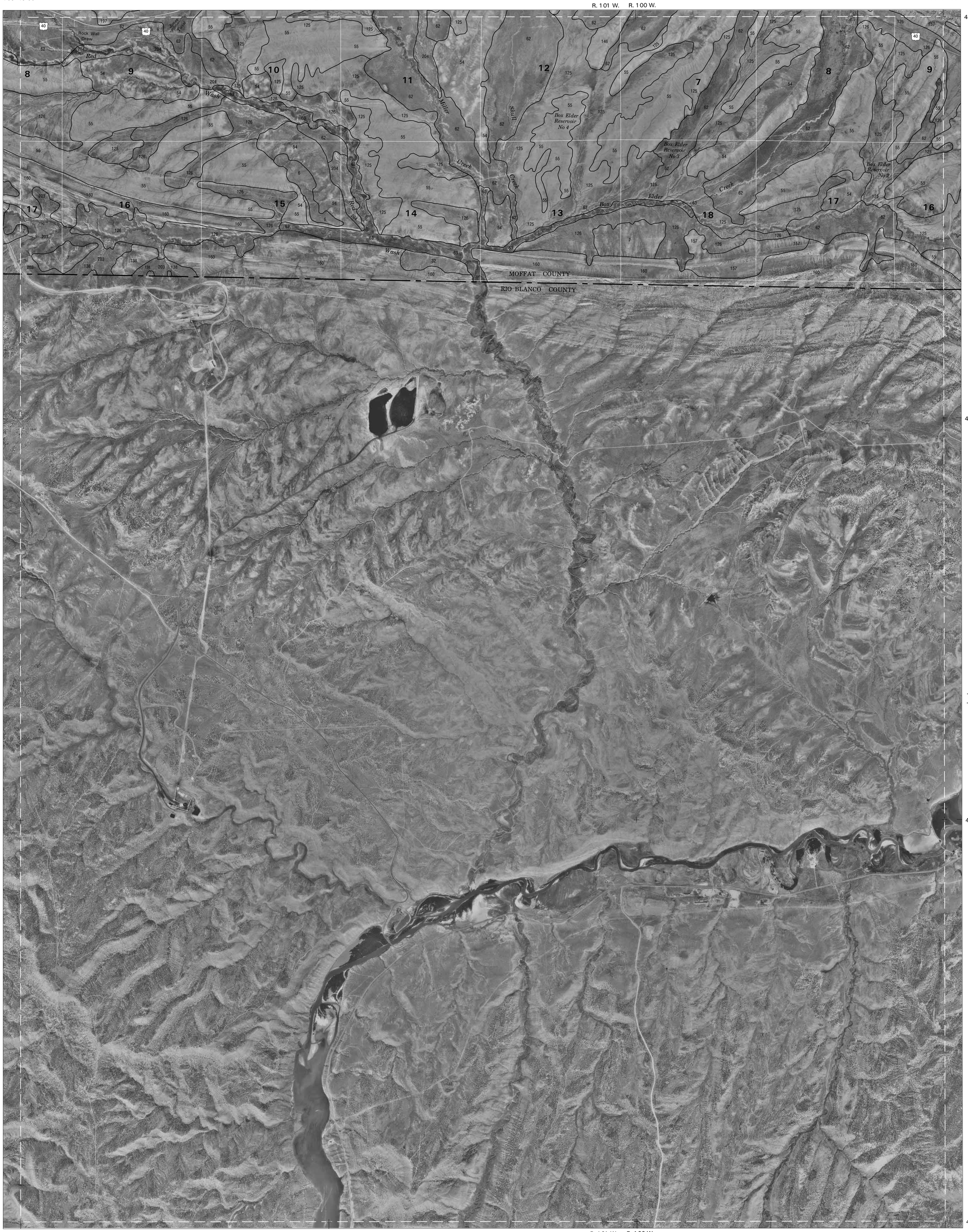
RANGELY NE, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 99 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
CACTUS RESERVOIR QUADRANGLE
SHEET NUMBER 100 OF 110

Joins sheet 85, Lazy Y Point
Joins sheet 86, Skull Creek
Joins sheet 87, M F Mountain
Joins sheet 99, Rangely NE
Joins sheet 101, Divide Creek

108°45′00″ 108°42′30″ 108°40′00″ 108°37′30″
R. 101 W. R. 100 W.
40°15′00″ 40°12′30″ 40°10′00″ 40°07′30″
T. 3 N. T. 2 N.



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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

CACTUS RESERVOIR, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 100 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
DIVIDE CREEK QUADRANGLE
SHEET NUMBER 101 OF 110

Joins sheet 86, Skull Creek
Joins sheet 87, M F Mountain
Joins sheet 88, Elk Springs
Joins sheet 100, Cactus Reservoir
Joins sheet 102, Rough Gulch

108°37′30″ 108°35′00″ R. 100 W. R. 99 W. 108°32′30″ 108°30′00″

40°15′00″ 40°12′30″ 40°10′00″ 40°07′30″

T. 3 N.
T. 2 N.

Box Elder Reservoir
Lower Wolf Creek Reservoir No 1
Lower Wolf Creek Reservoir No 2
Lower Wolf Creek Reservoir No 3
Wolf Creek
Divide Creek
MOFFAT COUNTY
RIO BLANCO COUNTY

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1 MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 0 1 KILOMETERS

QUADRANGLE LOCATION

DIVIDE CREEK, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 101 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
ROUGH GULCH QUADRANGLE
SHEET NUMBER 102 OF 110

Joins sheet 87, Mt Fillmore

Joins sheet 88, Elk Springs

Joins sheet 89, Wagrin Peak

108°30′00″ 108°27′30″ R. 99 W. R. 98 W. 108°25′00″ 108°22′30″

40°15′00″

40°12′30″

40°10′00″

40°07′30″

T. 3 N.
T. 2 N.

Joins sheet 101, Divide Creek

Joins sheet 103, Smizer Gulch

Coal Creek

PINYON RIDGE

MOFFAT COUNTY
RIO BLANCO COUNTY

10 11 12 7 8 9 10
15 14 13 18 17 16 15

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North American Datum of 1983 (NAD83), GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

ROUGH GULCH, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 102 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
SMIZER GULCH QUADRANGLE
SHEET NUMBER 103 OF 110

Joins sheet 89, Elk Springs

Joins sheet 89, Wapiti Peak

Joins sheet 90, Citadel Plateau

Joins sheet 102, Rough Gulch

Joins sheet 104, Indian Valley

108°22′30″ | 108°20′00″ | 108°17′30″ | 108°15′00″

R. 98 W. | R. 97 W.

40°15′00″ | 40°12′30″ | 40°10′00″ | 40°07′30″

T. 3 N.
T. 2 N.

MOFFAT COUNTY
RIO BLANCO COUNTY

Sagebrush Draw Wash
Crooked Creek
Deep Channel
Rimrock Gulch
Mc Andrews Gulch

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

SMIZER GULCH, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 103 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
INDIAN VALLEY QUADRANGLE
SHEET NUMBER 104 OF 110

Joins sheet 89, Wagon Peak

Joins sheet 90, Citadel Plateau

Joins sheet 91, Price Creek

108°15′00″ R. 97 W. R. 96 W. 108°12′30″ 108°10′00″ 108°07′30″

40°15′00″ 40°12′30″ 40°10′00″ 40°07′30″

Joins sheet 103, Smizer Gulch

Joins sheet 105, White Rock

T. 3 N.
T. 2 N.

MOFFAT COUNTY
RIO BLANCO COUNTY

Pinto Gulch
Willow Gulch
Creek
Channel
Deep
Rimrock
Gulch
Twin
Wash
Teds
Gulch

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

INDIAN VALLEY, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 104 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
WHITE ROCK QUADRANGLE
SHEET NUMBER 105 OF 110

Joins sheet 90, Citadel Plateau
Joins sheet 91, Price Creek
Joins sheet 92, Easton Gulch
Joins sheet 104, Indian Valley
Joins sheet 106, Devils Hole Gulch

108°07′30″ 108°05′00″ 108°02′30″ 108°00′00″

40°15′00″ 40°12′30″ 40°10′00″ 40°07′30″

R. 96 W. R. 95 W.

T. 3 N.
T. 2 N.

Coyote Deep Channel
Basin Creek
GRAY HILLS
Teds Gulch
Gower Gulch

MOFFAT COUNTY
RIO BLANCO COUNTY

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 12. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

WHITE ROCK, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 105 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
DEVILS HOLE GULCH QUADRANGLE
SHEET NUMBER 106 OF 110

Joins sheet 91, Price Creek
Joins sheet 92, Easton Gulch
Joins sheet 93, Axial
Joins sheet 105, White Rock
Joins sheet 107, Ninemile Gap

108°00′00″ 107°57′30″ 107°55′00″ 107°52′30″
R. 95 W. R. 94 W. R. 94 W. R. 93 W.
40°15′00″ 40°12′30″ 40°10′00″ 40°07′30″
T. 3 N.
T. 2 N.

MOFFAT COUNTY
RIO BLANCO COUNTY

Morgan Gulch
East Fork Morgan Gulch
Straight Gulch
Chokecherry Gulch
Collom Gulch
East Fork Collom Gulch
Little Collom Gulch
Wilson Creek

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

DEVILS HOLE GULCH, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 106 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
NINEMILE GAP QUADRANGLE
SHEET NUMBER 107 OF 110

107°52′30″ 107°50′00″ 107°47′30″ R. 93 W. R. 92 W. 107°45′00″

40°15′00″ 40°12′30″ 40°10′00″ 40°07′30″

T. 3 N.
T. 2 N.

MOFFAT COUNTY
RIO BLANCO COUNTY

Wilson Creek
Taylor Creek
Box Creek
Spring Creek
Good Creek
Little Creek

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

NINEMILE GAP, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 107 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
THORNBURGH QUADRANGLE
SHEET NUMBER 108 OF 110

Joins sheet 93, Axial

Joins sheet 94, Monument Butte

Joins sheet 95, Hamilton

107° 45′ 00″ | 107° 42′ 30″ | 107° 40′ 00″ | R. 92 W. | R. 91 W. | 107° 37′ 30″

40° 15′ 00″

40° 12′ 30″

T. 3 N.
T. 2 N.

40° 10′ 00″

40° 07′ 30″

Joins sheet 107, Ninemile Gap

Joins sheet 109, Sleepy Cat Peak

Wood Gulch
Milk Creek
Little Creek
MOUNTAIN
THORNBURGH
MOFFAT COUNTY
RIO BLANCO COUNTY

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

THORNBURGH, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 108 OF 110

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
SLEEPY CAT PEAK QUADRANGLE
SHEET NUMBER 109 OF 110

Joins sheet 94, Monument Butte

Joins sheet 95, Hamilton

Joins sheet 96, Pagoda

Joins sheet 108, Thornburgh

Joins sheet 110, Slide Creek

107°37′30″ 107°35′00″ R. 91 W. R. 90 W. 107°32′30″ 107°30′00″

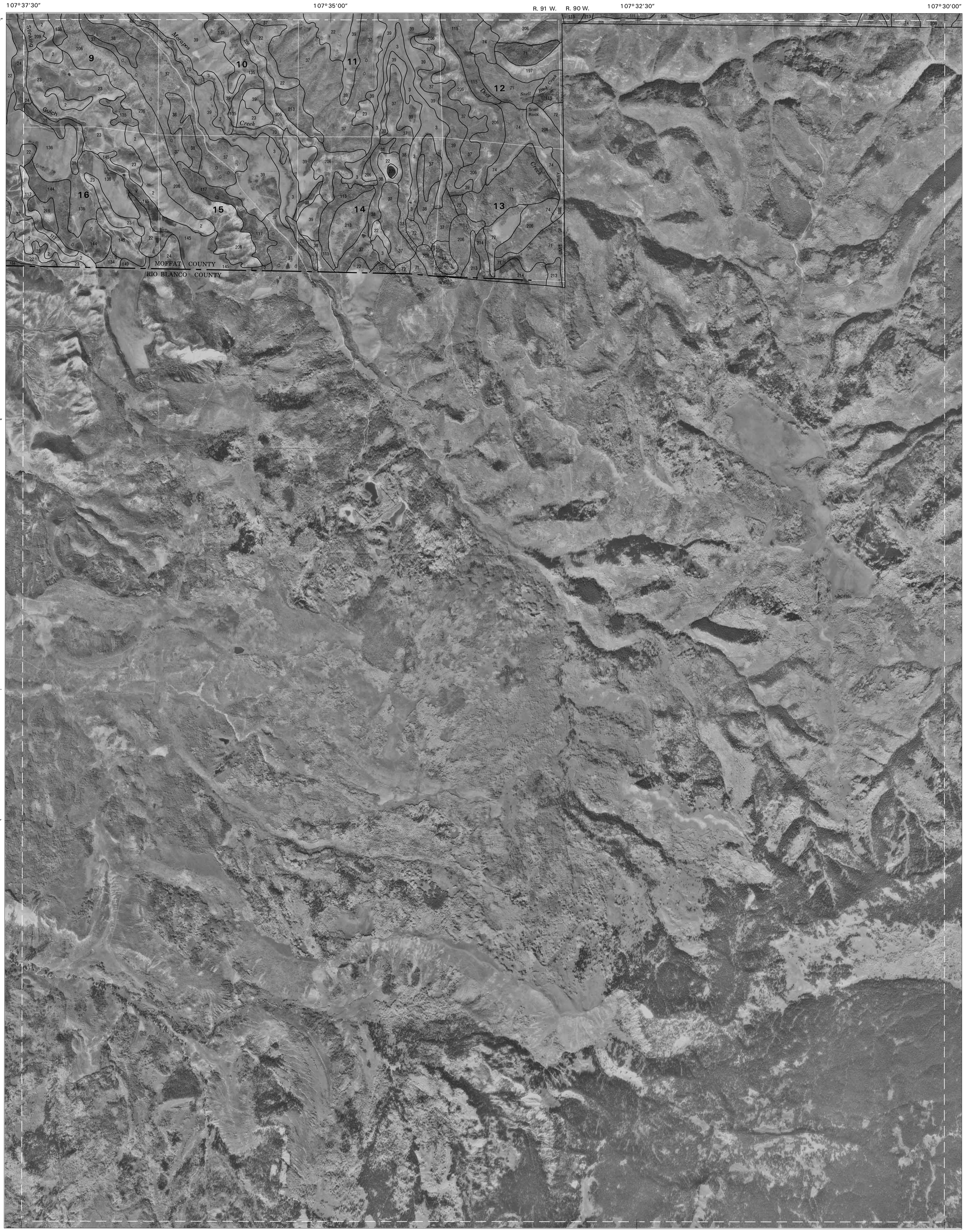
40°15′00″ 40°12′30″ 40°10′00″ 40°07′30″

T. 3 N.

MOFFAT COUNTY
RIO BLANCO COUNTY

SOIL SURVEY LIMIT

Stinking Gulch · Moratros Creek · Deer Creek · Snell Rock Creek · Snell Rock



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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1 MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 0 1 KILOMETERS

QUADRANGLE LOCATION

SLEEPY CAT PEAK, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 109 OF 110

Joins sheet 95, Hamilton

UNITED STATES
DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

MOFFAT COUNTY AREA, COLORADO
SLIDE CREEK QUADRANGLE
SHEET NUMBER 110 OF 110

Joins sheet 96, Pagoda

107°30′00″ 107°27′30″ R. 90 W. R. 89 W. 107°25′00″ 107°22′30″

40°15′00″

40°12′30″

T. 3 N.

40°10′00″

40°07′30″

Joins sheet 109, Sleepy Cat Peak

MOFFAT COUNTY

ROUTT COUNTY

RIO BLANCO COUNTY

Creek

Lynch

Pine

SURVEY

10 11 12 13 14 15

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North American Datum of 1983 (NAD83). GRS-80 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 13. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

SCALE 1:24000

1 0 1
MILES

1000 0 1000 2000 3000 4000 5000 6000 7000
FEET

1 0 1
KILOMETERS

QUADRANGLE LOCATION

SLIDE CREEK, COLORADO
7.5 MINUTE SERIES
SHEET NUMBER 110 OF 110